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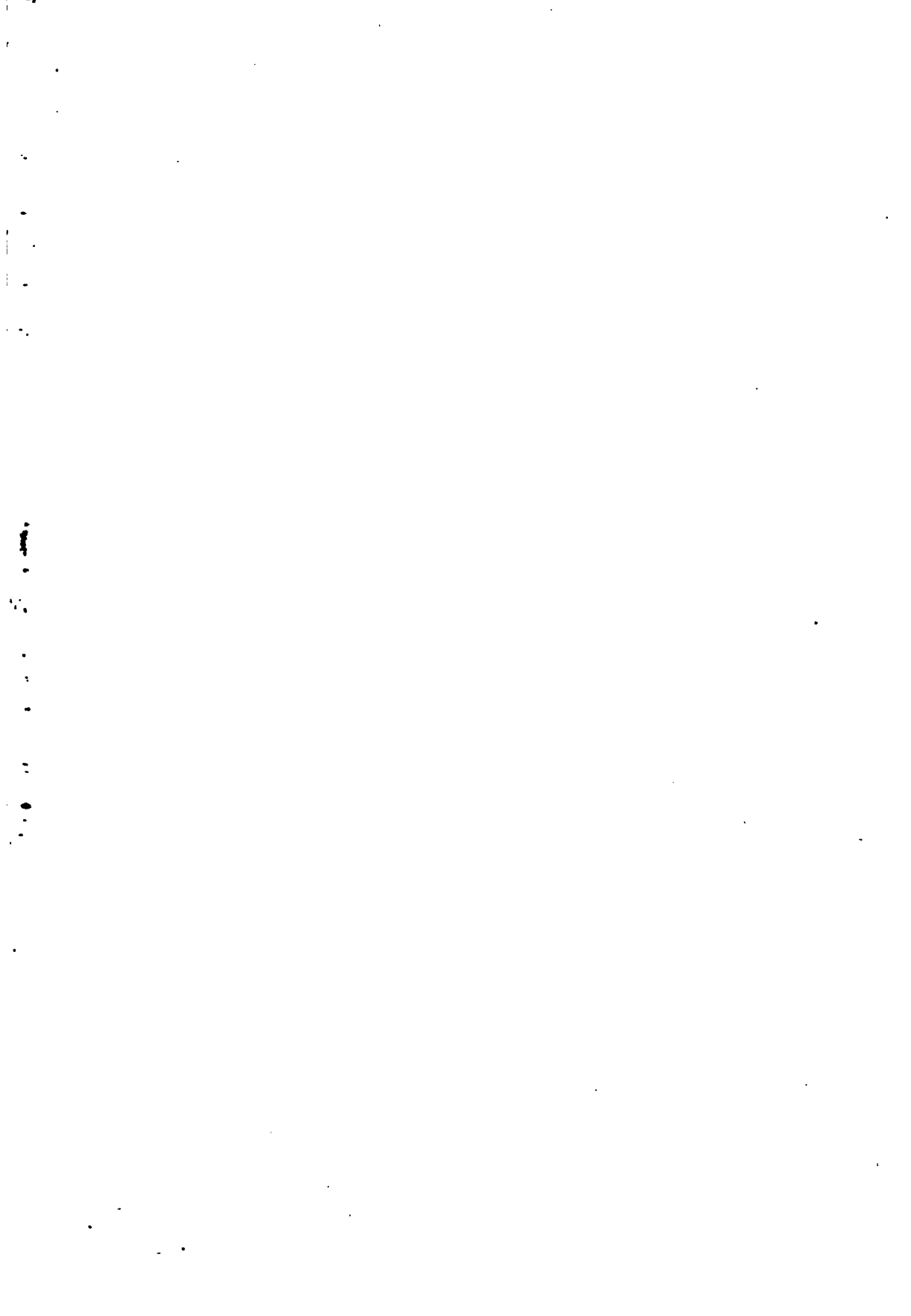
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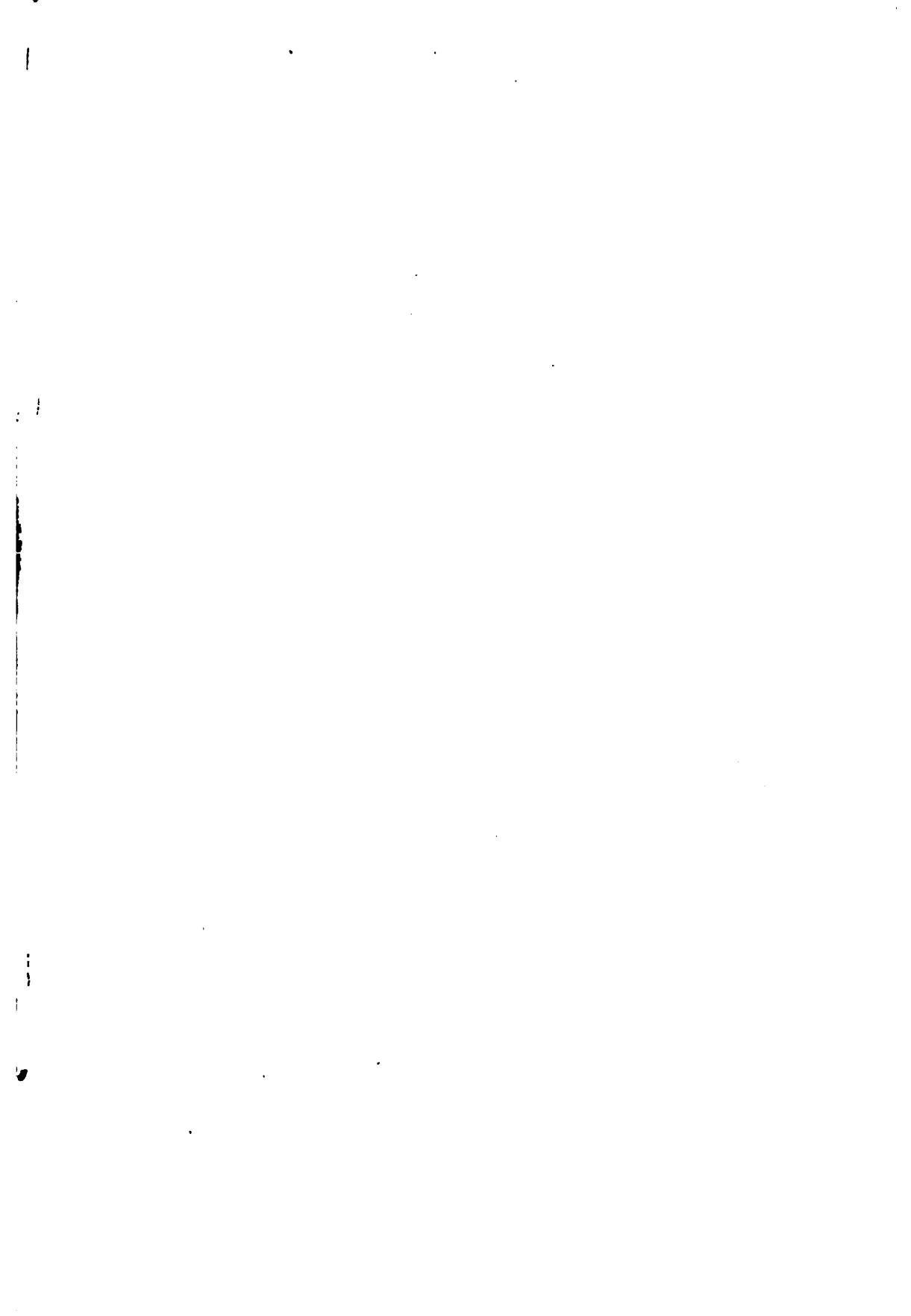
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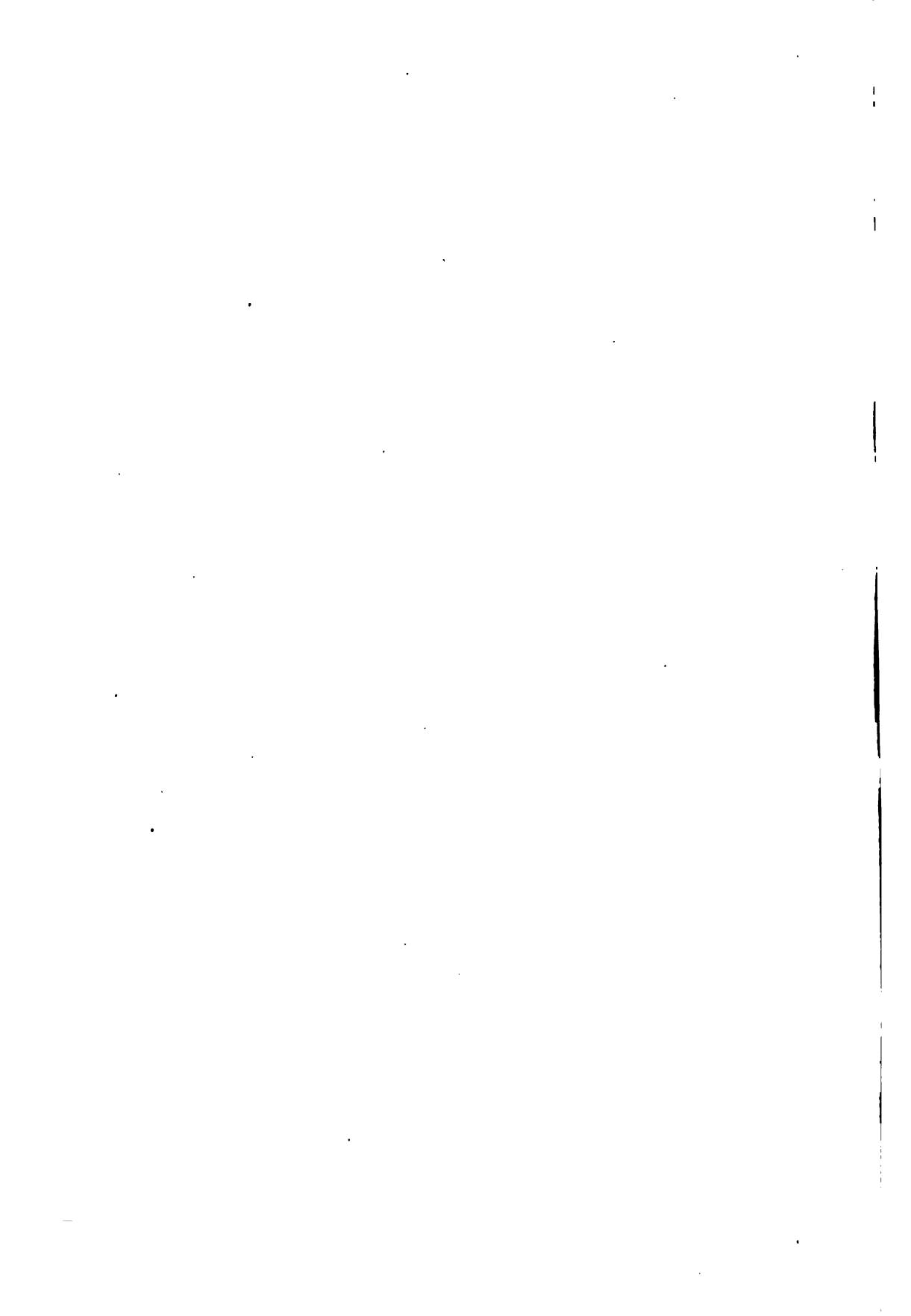
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JOURNAL OF
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EDITED BY
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JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

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No. 1.

Original Communications.

TWO CASES OF A RARE PAPULAR DISEASE AFFECTING THE AXILLARY REGION.

BY GEORGE HENRY FOX, M.D.,

WITH A REPORT ON THE HISTOPATHOLOGY.

BY JOHN A. FORDYCE, M.D.,

THE first patient who presented the peculiar eruption which I wish briefly to describe, entered the New York Skin and Cancer Hospital in January, 1899. She was twenty-eight years old, unmarried, and born in Russia. The eruption was mainly confined to the axillary region, had existed for a year or more and caused no little distress. The itching was intense and of a paroxysmal character, robbing her of sleep and impairing her general health in a marked degree. The patient was thin and of a highly neurotic temperament and it was not easy to determine to what extent the impaired health was a cause or a result of the distressing dermatosis.

The eruption was of a papular character and the lesions were numerous, small, firm, smooth and rounded. The skin was deeply infiltrated and slightly fissured. The aggregated papules were of normal color or but slightly reddened, although the scratching produced at times a considerable amount of congestion and excoriation.

Over the pubic region were a number of small rounded papules, evidently of the same nature as those in the axillæ but not accompanied by such intense pruritus. Upon other portions of the body no sign of eczema or other disease was noticeable.

Upon the assumption, after my first examination of the patient, that the eruption was either a chronic lichenoid eczema or one which

would at least yield to the usual treatment of such a condition, a variety of local applications were successively employed. Nitrate of silver, oil of peppermint, tar and chrysarobin were alternated with ichthyol, zinc ointment and carbolated vaseline, and I may add that never in my experience have I seen a case in which local treatment has had less beneficial effect.

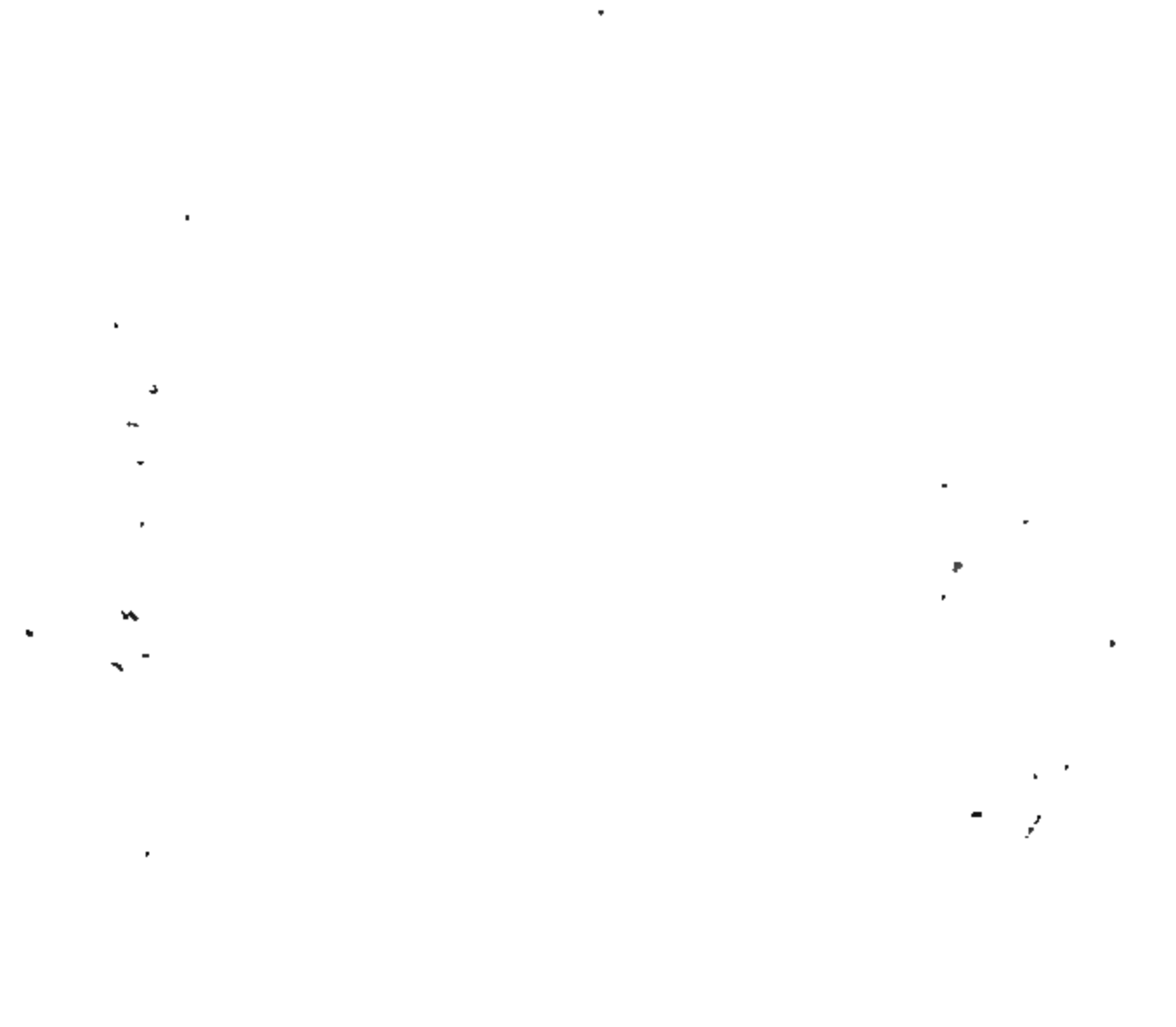


Fig. 1. Papular disease of axilla showing papule and dilated sweat coil.
(Spencer 1 m., no ocular.)

Bromides and trional were found necessary to relieve the persistent insomnia, while arsenic and iron, together with compulsory exercise in the open air were prescribed for their tonic effect. At times slight improvement both general and local was noted, but after eleven months in hospital the patient was finally discharged in a condition which clinical accuracy compels me to characterize as "unimproved."

I have met with one other case of this rare, obstinate and distress-

ing affection. This occurred in a young man who was extremely neurotic and suffered much from the intense pruritus. As in the case above reported, the eruption consisted of small, rounded, aggregated and almost colorless papules. It was confined to the axillary region and resisted the ordinary methods of treatment.

HISTOLOGICAL REPORT BY JOHN A. FORDYCE, M.D.

Two papules were removed from the anterior axillary region by the cutaneous punch. They included the deep lying coil glands. The



Fig. 2. Hypertrophy of epidermis with horny plug in sweat-duct orifice.
(S. $\frac{1}{2}$ in. proj. ocular 2.)

excised papules were cut serially in paraffine and stained in various ways. The papules removed were a line or less in diameter and showed little or no evidence of inflammation. The case was only seen once so that the early stages and subsequent evolution of the lesions were not observed.

The most striking change in the skin was a hyperkeratosis covering the papule and extending into the openings of the sweat ducts and hair follicles. The latter in some of the sections were considerably dilated, filled with a horny mass and the hair producing power of the

follicle evidently destroyed. At the sweat pores the stratum corneum was thicker than in other places, the hyperkeratosis extending deeply into the intra-epidermic portion of the duct. The papule appeared to be chiefly of epidermic origin, a considerable degree of acanthosis being present as is seen in the thickened and lengthened interpapillary rete pegs. This epidermic hypertrophy surrounds the sweat ducts and hair follicles and probably results from the hyperkeratosis which extends from the surface.

Fig 3. Hyperkeratosis of sweat-duct and adjacent hair-follicle
(S. 1 in., proj. ocular 2.)

In Figures 1, 2 and 3 photographs of the sections are shown which illustrate the changes in the epidermis that have been mentioned. The plugging up of the sweat ducts with horny matter results in a pronounced dilatation of the underlying coils and ducts. In figure 1, which is a low power photograph of an entire section, the relationship of the surface changes to the dilatation of the coils is well shown, the serial sections enabling one to readily trace the dilatation of the coils to the surface changes. The hypertrophied rete was evidently of slow growth as very few mitoses were observed. In the derma inflam-

matory changes of a more or less chronic character were seen in exudation of lymphoid cells and a few polynuclear leucocytes about the vessels accompanying the coil ducts. A new growth of connective tissue was also observed in the same locality. The change in the coils is probably primarily a mechanical dilatation due to obstruction, followed by secondary changes in their epithelial lining of a degenerative nature.

The intense itching which was so annoying to the patient may have been due to irritation of the terminal nerve fibers in the epidermis or to the retention of fatty acids or other irritating substances in the sweat.

In brief the histological changes in this case consist (1) of a hyperkeratosis involving chiefly the sweat-duct orifices, their intra-epidermic portions, and the orifices of the hair-follicles. (2) Consecutive hypertrophy of the stratum spinosum (acanthosis) surrounding the altered sweat ducts and hair follicles. (3) Mechanical dilatation of the coil glands which result in changes in their epithelial lining. (4) Inflammatory changes of a more or less chronic character in the derma.

The histological picture here presented is similar to that seen in porokeratosis as can be readily confirmed by comparing the photographs made from my sections with the drawings which accompany Dr. Gilchrist's article (*JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES*, Vol. XVII., page 149).

REPORT OF A CASE OF IDIOPATHIC MULTIPLE SARCOMA OF THE SKIN.

BY HENRY H. KOEHLER, M.D.,
Professor of Skin, Genito-Urinary and Venereal Diseases, Kentucky University
Medical Department, Louisville, Ky.

WITH A REPORT ON THE HISTOPATHOLOGY,

BY JAS. C. JOHNSTON, A.B., M.D.,

CASES of multiple cutaneous sarcomata are relatively rare but in spite of their infrequency quite a number of clinically different varieties have been described. Histologically, however, they show no such great diversity and they may be divided into spindle celled (fusocellular) and round celled (globocellular).

Unna also described a giant cell sarcoma.

Kaposi classes under sarcoid tumors of the skin several apparently distinct disease entities prominent among which is his idiopathic multiple pigment sarcoma. He also describes under type C., in his text book, another variety, referring to it as simply Sarcomatosis Cutis, which differs from the foregoing in many respects. The case I here present exhibits clinically, characteristics of both types. The histological examination, kindly made by Dr. James C. Johnston, shows a greater resemblance to the multiple idiopathic pigment sarcoma than to the other as will be seen by his report. There is an absence though of pigment which in the hemorrhagic variety would naturally be a feature. The patient, however, is of a very fair type, with light blue eyes, reddish hair, and a very white skin, and it may be that a general lack of pigment formation is in a measure responsible for the lighter color of the tumors.

Unna in his "Histopathology of the Skin" makes the following divisions of skin sarcomata. He would first place the so-called melanotic sarcomata among the carcinomata, claiming that he has found abundant microscopical evidence to justify his doing so. The true sarcomata he divides into two great groups, the solitary, and the multiple. Of the multiple he gives the following five varieties:

1. Sarcoma Multiplex Cutaneum durum album.
2. Sarcoma Multiplex Cutaneum durum pigmentosum.—Piffard.
3. Sarcoma Multiplex Cutaneum Molle.—Neumann.
4. Sarcoma Multiplex Cutaneum gummatodes.—Funk, Hyde.
5. Acrosarcoma Multiplex Cutaneum teleangiectodes.—Hebra, Kaposi.

The case here under consideration resembles the description of the first variety closely even to the absence of pigment. Unna regards the fusocellular variety of sarcoma as the main type of the cutis proper since the spindle cells "repeat the normal type of the connective tissue of the skin of adults." A characteristic of the spindle cell variety, as is shown in this case, is the absence of an ulcerative tendency. Ulceration is much more marked in the round cell variety (Type 3 Unna).

Clinical Report: Patient is a Hebrew, born in Russia, and was referred to me by Dr. Leon L. Solomon. He has a good constitution and has always enjoyed good health. He is fairly intelligent and denies ever having had a specific infection. He has been in this country about eight years uninterruptedly and the disease which he is now suffering from developed in 1899. The attack came on immediately after a severe exposure. The patient made a trip to Cincinnati on a boat sleeping in a very warm room. In Cincinnati he slept in a very

cold room and on coming home shortly afterward he noticed the tumors for the first time. The eruption commenced first on the extremities, later on extended to the trunk and face. Dr. Solomon tells me that at

Fig. 1.

times several nodules had ulcerated, although the tendency to this seems to be very slight. He complains of muscular pains very much like those of muscular rheumatism. The nodules themselves are painless and devoid of any subjective sensation. The extirpation of one

caused profuse bleeding but little pain. In the fall of 1900 he had an acute febrile attack after which he had attacks of dizziness with loss of appetite and pains in knees and legs. In May, 1901, he again had similar pains in lower legs and knees. The patient is a pronounced blonde and has hitherto been entirely free from any eruption of any kind, a point upon which he dwells. Patient perspires very freely and claims that he feels himself weakened thereby. His children are healthy. He is about fifty years of age.

Fig. 2.

Present state: Health fairly good. No marked deterioration from former standard. Patient at times has fever. As shown in the photographs the eruption is quite generally distributed and symmetrical. The color of the tumors is a reddish brown somewhat like that of a keloid. A slight purplish tinge is noticed in those on the lower extremities. They are vascular, firm to the touch, elastic with no pain on pressure. The extensor surfaces are more involved than the flexor surfaces. On the forehead the nodules have fused together and give him a leonine expression. The eyelids are much infiltrated. On the top of the larger tumors there is a distinct condition of telangiectasis.

No ulceration anywhere at present. Palms and soles are spared. No lymphatic enlargement anywhere. He exhibits no clinical symptoms that point to leukemia or pseudo-leukemia. Since the advent of warm weather slight hemorrhages have taken place in several of the tumors.

Dr. Solomon in referring this case stated that he had at one time given this patient strontium arsenite, by mouth, with some temporary benefit. He is at present receiving injections of sodium arseniate according to the method of Kaposi. In giving them I notice a general hardness of the skin, as shown by marked resistance to the entrance of the hypodermic needle. This treatment has been used for about a month (0.02 gramme every other day) without appreciable affect on these tumors.

Dec. 7.—The patient took the arsenic injections for about two months. Finding no improvement in that length of time he absented himself. During the last few months he has been without treatment and it is quite apparent that his disease has progressed. The infiltration on the forehead has thickened, and innumerable small nodules stud his body between the larger ones. The color has also deepened and the tumors look congested. His health is fairly good, he has lost no flesh and has been able to follow his trade of shoemaker. Lymph-nodes nowhere show any involvement. Urine normal, no casts or albumin. He wishes to return to the arsenic treatment as he believes it at least kept the disease in check. There is not the slightest tendency to ulceration or breaking down of tumor tissue.

Histopathology.—The growth which Dr. Koehler sent me measured about three-eighths of an inch in diameter by one-eighth in thickness, but it is apparent from the sections that not all of its mass was included, either peripherally or below. There is a surface erosion at the center. There can be no reasonable doubt that the histological features are the same in all the tumors, although I can not however make a definite statement on the point since I have had only the one for examination. The microscopical picture is a new one in my experience.

The process evidently begins as most skin sarcomas do in the lower reticular layer and upper hypoderm. It never invades the papillary body and seems limited by the lower level of the coil glands beneath. The upper border is flattened and sharply defined (as in fact the periphery is everywhere) by dense collagenous bands running parallel with the periphery. The condensation with the disappearance of the papillæ and interpapillary projections is the result of pressure from the subjacent tumor. The under and lateral borders show lobulated outgrowths into the surrounding skin. In other words, the method of

progression is by a gradual pushing aside of the connective tissue as in epithelial neoplasms, rather than the conversion into new growth which is the way with sarcomas even when an attempt is made at encapsulation. Other striking general features are the absence of reactive inflammation of vessel dilatation, and of pigment of any sort.

In the peripheral, presumably newer, portions there is a close packing of spindle cells whose protoplasm stains lightly with basic dyes

Fig. 3. Periphery of growth showing contorted spindles and disappearance of papillæ and interpapillary projections.

and whose outlines are indistinct. Their nuclei stain deeply and diffusely like those of young fibroblasts, but, unlike them, are not uniform in size or shape. The latter is greatly varied; some show thickenings like nodes, others are filamentous, some are shaped like spermatozoa and others still are bent at right angles on themselves. Between them, the delicate reticulum of sarcoma is easily brought out by a fresh picric-acid-fuchsin stain. These nuclear distortions can be due to but one

thing, outside pressure. The reason for the pressure is found in a totally different type of cell lying between the spindles, even where they are most numerous.

At the growing edge, they are overshadowed by the mass of spindles, but in the central portion, the relative numbers are reversed and the spindle cells almost disappear. The second variety is ovoid or polyhedral, with a protoplasm refractory to most stains (picric acid colors it readily) and oval vesicular nuclei with one or two nucleoli. They lie in nests surrounded by a delicate membrane which does not

Fig. 4. High power view of an older portion stained with picro-fuchsin to show intercellular reticulum. Spindles have largely disappeared before endothelial new growth.

stain with fuchsin and is not the sarcoma reticulum. With the spindle cells, the reticulum disappears. A lumen may be seen in the center of a very few of the nests or whorls which sometimes contains blood. In certain sections, there appeared a giant cell formation with numbers of small round nuclei, but as it often showed both a central lumen and a clearly defined, limiting membrane, I judged it the remains of coil glands caught in the growth as remnants of collagenous material are ensnared here and there. Mitosis is excessively rare; cell division is direct throughout.

The origin of this second type of cell is not hard to determine. From its morphology and arrangement, it can arise only from proliferative activity in endothelium, from lymphatics and blood capillaries, whether preëxistent or newly formed it is impossible to decide. The whole tumor shows very few patent vessels of any sort but in spite of this, there is no necrosis. Even the englobed tissue remnants are in a perfect state of preservation.

It is a well recognized fact that in sarcoma, particularly of the skin, there is in certain instances a tendency to endothelial proliferation as in Kaposi's idiopathic, pigmented sarcoma and the case which I described in a recent article on this subject. (JOURNAL, July, 1901.) There is no reason to suppose that in a given instance every capillary may not show this proliferation with whorl formation, in the course of time, blotting out almost completely the growth with which it first appeared. If this supposition is correct, the tumor should be classed with sarcomas, although I regard endothelioma as much more nearly allied to epithelial than to connective tissue new growths both from histogenetic and morphological standpoints. Among the sarcomas, it is clear that its place is with the Sarcoids for these reasons; there is an absence of the appearance of malignancy, such as infiltration of the surrounding skin, of evidence of rapid cell division, of any striking departure from adult cell types, fibroblastic or endothelial (the types are found in pure processes of productive inflammation), and finally, of the absence of metastases, in lymph nodes or viscera. All these peculiarities are characteristic of the class of cutaneous sarcomas which I think we are obliged to make and for which Sarcoid will serve as well as another name. The sarcoids have a cachexia, however, of their own in spite of failure to metastasize. The tumor in question is most closely allied to Kaposi's multiple, pigmented sarcoma which should be called hemorrhagic. Hemorrhage is of course only an accident, though due to peculiarities of structure. It is not present in our case because the vessels are not only fully formed but occluded. The reason for the failure to respond to the use of arsenic is found in the predominance of the endotheliomatous element. Such tumors do not yield to the drug, the fact of its inefficacy furnishing basis for a grave prognosis. As in other endotheliomas, moreover, it is always possible to develop metastasis under irritation or without any appearance of it.

In conclusion, the tumor is a small, spindle-celled sarcoma with which occurs such endothelial proliferation as to strangle the sarcoma element in the older portion. It is free of pigment, hemorrhagic or metabolic, and belongs to the class of Sarcoids, constituting a new

type but nearly allied to multiple, hemorrhagic sarcoma. Dr. Koehler is within his rights in classing it clinically with the Unna group he has selected.

My thanks are due Dr. B. H. Buxton for the accompanying microphotographs which admirably illustrate the histological features I have attempted to describe.

AN EXTRAORDINARY CASE OF QUININE SUSCEPTIBILITY.*

BY HENRY W. STELWAGON, M.D.,
of Philadelphia.

CASES of eruptive phenomena from the ingestion of quinia preparations are common enough in literature, and fairly well known, and therefore the publication of new instances is probably only justified by some unusual feature or for the purpose of calling attention to the possible confusion of some of these rashes with the exanthemata, especially with the so-called second attacks of the latter. The case which I shall briefly detail is one especially striking on account of the smallness of the dose necessary, the many ways in which the drug, surreptitiously so to speak, gains access, and the uncomfortable results which follow. The patient is a gentleman of good health, robust habit, and at the present time is in middle life. So far as he can recall he has had in all about twenty to twenty-five attacks of a scarlatiniform erythema followed by branny and lamellar and sheet-like desquamation, with more or less accompanying itching, and running a course of several weeks. The cause of the first three or four outbreaks was not even suspected. I saw this gentleman several years previously in one attack in consultation with Dr. H. A. Smith of Philadelphia, who had already seen the patient in one or two other attacks; and who, together with the patient himself, whom I saw a few weeks ago for the purpose of having the data corroborated, has kindly placed at my disposal most of the facts here given. I shall only refer to eight or ten outbreaks.

The attack which threw the first light or suspicion on the probable cause occurred some years ago. At the time the patient was not feel-

*Read at the Twenty-fifth annual meeting of the American Dermatological Association, held at Chicago, May 30, 31 and June 1, 1901. Since reading this paper I find that a brief note of an attack in this case was recently made by Dr. Hare, *Therapeutic Gazette*, May, 1901.

ing up to his usual standard, and consulted a prominent physician in my city, who was then his family attendant, and who prescribed for him quinia in the average dose, the exact amount of which he does not recall; this was immediately followed by a rapid development of a scarlatinous rash, which was thought to be an example of a second attack of scarlet fever. It ran a somewhat similar course, and when it had about passed off, after the resulting exfoliation was practically ended, as he was not feeling in very good condition, a tonic containing quinine was given him to brace him up, and he forthwith had another attack. Some time later, not feeling up to his general tone, he thought he would consult a distinguished surgeon of our city, since deceased, whom he knew both socially and professionally, and stated to him that he felt that he needed a tonic. At the same time he called his attention to his extreme susceptibility to quinia, concerning which the physician remarked that it was all nonsense, and then prescribed for him a mixture of which the basis or vehicle was the elixir of calisaya, each dose containing about one-eighth of a grain. One dose of this mixture was sufficient to apprise him that he had taken the drug, and another outbreak resulted. Another instance was when he dropped in on a relative—a druggist—whom he happened to find just at that moment engaged in the manufacture of a preparation of bitter wine of iron, of which he thought highly, and the enthusiasm of the druggist affecting his visitor, he sipped some, and within an hour or so he was again ushered into another scarlatiniform cycle of a few weeks' duration. At another time, some years ago, he was visiting in Boston, and while out walking with his host or friend, his companion was expatiating upon the merits of a new drink; he was induced to try one, and as one of its good qualities was due to a pleasant bitterness from a trifling amount of calisaya bark, it was but a brief time before the Philadelphian was again in the throes of another outbreak, and his eastern visit was stripped of some of its pleasantness. Once subsequently he was again the victim of an enticing decoction. He and a few friends were on their way northward for a fishing trip; they were joined at an interior Pennsylvania town by a friend who was to go with them, and who, to make his welcome the more hearty, had had prepared and brought on board of the train with him a cocktail for each one of the party—which was properly enjoyed—but the susceptible quinia friend soon found that a cocktail usually contains bitters, of which calisaya is often a representative, and instead of going fishing was obliged to retire and go through the process of again shedding his epidermis.

A few years later at the end of an acute pulmonary disease, as he

was not making rapid progress towards complete recovery, two other physicians were called in as consultants, and who, although made aware of the quinia idiosyncrasy, but not placing the same weight upon it that the patient did, finally agreed that the compound syrup of the hypophosphites, made by a western manufacturing firm, was the right thing for him, considering that the amount of quinia contained therein was practically nil—but one dose of it was enough to bring on another ordeal of the scarlatiniform rash, with its usual course. Some time after this experience, perhaps a year or two, he was on a pleasure visit to a southern sulphur spring resort, and on a social call on a prominent physician there whose name is familiar to us all, and while in his house, in response to a question about his health, casually remarked that he had a slight coryza, and he was kindly offered a rhinitis tablet. Naturally his immediate inquiry was as to whether it contained any quinine, the physician replying that it did not, and in order to convince him and relieve his mental doubt and agitation, showed him the book of formulæ of the firm manufacturing it. It was taken, but it was but a few minutes, however, before the patient became aware that the tablet contained the dreaded drug, and his pleasure visit was turned into several weeks of discomfort, with the initial lobster red skin and the subsequent exfoliation. Unfortunately the book which contained the printed formulæ was an old one, and an inspection of a more recent list showed that the rhinitis formula had been somewhat changed, and now contained one-eighth grain of quinine. It was some months perhaps after this when his family physician was called in to see him, as he was suffering from a slight cold. His physician usually carried with him a small supply of tablets, of which he prescribed some composed of several ingredients, of which the patient was to take one every half hour or hour. Being well aware of his patient's idiosyncrasy, nothing was said on the subject of their composition. The physician had been but a short time at his office, after his return from this visit, when a messenger came from the patient, asking if the tablets contained quinine, as he was experiencing the first sensation of cutaneous warmth or flushing, although he had taken but one tablet. Sure enough it had inadvertently been forgotten or overlooked that the tablet contained, in addition to other ingredients, one-sixteenth grain of the salt, and this was enough to bring on an attack, which followed as a matter of course. It was in this attack that I was called in as the consultant. A few years later while the gentleman was in Paris, he ran out of his supply of tooth powder, and went into a nearby drug store to replenish. The druggist especially recommended a liquid tooth wash of his own preparation, which was

accordingly purchased. After the second toilet usage of this he had another general attack just as violent as those which had preceded it. An American physician resident in Paris was called in, and who subsequently upon inquiry discovered that the tooth wash contained an infinitesimal quantity of calisaya to give it a clean and refreshing taste. Some time after this, when in Philadelphia again, he went into the barber shop of a prominent clubhouse of which he is a member, and had his hair cut. The barber followed it with a hair tonic. While still in the chair, after the hair had been rubbed dry and combed, by a peculiar cutaneous sensation he was led to ask the barber what he had put on his scalp, stating at the same time that he felt as if he had taken a dose of quinine; to which the barber replied that it was a quinine hair tonic that he had used. Remarkable to say, and almost impossible to believe, the patient was thus brought again into another well marked attack. The application itself did not irritate, nor did the rash begin in the scalp, but the attack was the same as all the others, and presented itself in the usual manner.

Thus is outlined a part—a greater part probably—of this gentleman's curious experience with this drug. In short on many occasions his life has been made burdensome by this extreme susceptibility, against which he is not always able to protect himself, unless he eschews drinks and compound medicines of all kinds. Even then, as has been seen, he may be the victim of a dentrifice, a hair tonic or similar unsuspected and innocent looking article or preparation. He is even somewhat panicky when obliged to consult a strange physician, for in spite of his statements of his susceptibility, which he of necessity feels obliged to refer to strongly, he is not sure, but as before, the matter may be considered over-exaggerated or nonsensical, and the liberty again taken to give him at least a compound tincture of cinchona or elixir of calisaya as the basis or vehicle of the formula prescribed. The attack as I saw it, which was stated to be the same as all the others, was distinctly suggestive of scarlet fever, as the quinia rash usually is. On the first one or two days, moreover, there was slight temperature elevation, and the skin was of the bright punctiform red color. The redness subsides in from two to four or five days, and this is followed by the thin epidermal exfoliation usually observed in the scarlatinous rash. Strange to say, the patient stated to me that but a few minutes elapsed after he has taken the drug before he feels a flush go over the entire surface body, and he knows at once that the mischief has been done. His nails have always remained unaffected.

Book Reviews.

Pathologie dern blennorrhischen und venerischen Lymphgefässe Erkrankungen.
(*Pathology of Gonorrhœal and Venereal Lymphangitis.*)—By G. NOBL. 155
pp. 1901: F. Dentuke, Wien.

The author of this monograph discusses the pathology of inflammations of the dorsal lymph vessels of the penis, complicating diseases of the external genitals. His material was obtained at operations, such as for circumcision, the hard lymphatic cord being dissected out and studied in serial sections.

After a historical résumé, not always relevant, he refers to Biesiadecki's results in 1872, obtained by study of two cases of lymphangitis complicating chancres. In these cases the essential feature of the lesions were exfoliation of the lymphatic endothelia, fibrinous coagula in the lumen, and practically normal conditions in the vessel's walls otherwise.

Nobl describes the lymph vessels of the part, as he has studied them by injection methods, as a dorsal superficial set, a second superficial set along the raphe communicating with the former, and a deep set which begins by a fine meshwork in the glans and empties into the pelvic nodes; venereal lymphangitis attacks the first of these almost exclusively.

As the complication is noted with gonorrhea, chancre and venereal ulcers, the work falls naturally into corresponding divisions.

Gonorrhœal lymphangitis occurs in 1.3 per cent. of the cases examined (2133 during five years), but persists so short a time that it may be overlooked. In the gross it appears on the dorsum as a thick, hard and reddened cord, from a knitting needle to a little finger thick, painful on erection and independently. The skin over this cord is usually not adherent to it. The microscopic findings are given in detail for eight cases. Condensed, the lesion is as follows:

The lymph vessel alone is affected, not the adjacent blood vessels; the nature of the process is partly exudative, partly productive; the endothelial lining swells, its cells proliferate and desquamate, the lumen may thus be entirely filled. The cells found, beside proliferating endothelia, are chiefly mononuclear leucocytes, with a few polynuclear and fibroblasts. Round cells infiltrate the adventitia and even the media in severe cases, coming from the nutritive capillaries of the lymph vessel. Neighboring collagen bundles may be edematous, with proliferating spindle cells. There is no tendency toward either suppuration or organization. In five out of nine cases examined for gonococci a few of these organisms were found inside the vessel. Attempts to cultivate these failed, and the plates were sterile of even pyogenic forms.

Associated with chancre similar endolymphangitis obliterans may occur, and at times there are foci of suppuration along the course of the lymphatic. Such a lymphangitis was observed in 4.7 per cent., usually about the third week after infection and before there was marked swelling of the inguinal nodes.

With venereal ulcers the lesion complicated about 3.3 per cent., and suppuration was more common than in either of the other classes.

In other words, in all three kinds of cases there is a proliferation of the lymphatic endothelia, with a peri- and para-lymphangitis if the lesion is specially

severe. With gonorrheal cases the gonococcus may sometimes be recovered from within the vessel but no pyogenic forms. In the syphilitic cases there is rather more hyperplasia of the connective tissue elements about the lymphatic, perhaps in concentric layers, and no organism is found. With the venereal ulcer a pyogenic infection occurs and small ulcers follow destruction of the lymph vessel wall.

The monograph is not an important addition to our knowledge; it confirms Biesiadecki's results in detail; its chief interest lies in its presentation of lymphangitis in connection with acute gonorrhea, with demonstration of the coccus *in situ*; in style it is verbose and redundant.

E. H. THAYER.

Chronic Urethritis.—By KEERSMACKER and VEERHOOGEN. Translated and edited by LUDWIG WEISS, M.D. Wm. Wood & Co., New York, 1901.

This little volume is a valuable addition to our present knowledge of urethral disease. The authors follow the teachings of the Oberlaender school, and the translator has made additional notes of value covering ground not embraced by the original authors.

The main portion of the work consists of a description of the urethroscopic appearance of the urethra in health and disease, and the technique of urethroscopy and the treatment of chronic urethral disease by means of the Oberlaender or Kollmann's dilators. As these instruments apparently are coming more and more into vogue, this work will give valuable assistance to those who attempt this system of treatment; in fact these instruments, as is all urethral instrumentation, are certainly dangerous agents in the hands of unskilled operators.

One statement in the book, page 156, we cannot leave unchallenged, and that is the grounds on which coitus should be permitted to sufferers from chronic urethral disease. First it is to be allowed because if interdicted our commands would be disobeyed; second because in some patients nocturnal losses have a deplorable moral effect. Neither of these reasons seems to us to be sufficient. If our commands are disobeyed that should be done on the patient's own responsibility. As to the latter reason, it is better to teach the patient the elements of sexual hygiene and try to eradicate some of the nonsense which quack literature has instilled into the minds of many of these patients of the harmful effects of nocturnal emissions.

At the end of the book are a number of urethroscopic pictures done in color of normal and diseased types. We could wish there were more of them, especially of the posterior urethra.

Manual of Venereal Diseases. By F. R. STURGIS, M.D. Seventh edition, revised and in part rewritten by F. R. STURGIS, M.D., and FOLLEN CABOT, M.D. P. Blakiston's Son & Co., Philadelphia, 1901.

This very readable book will undoubtedly find a ready welcome among medical students and practitioners in general.

We must take issue with the writers in their treatment of suppurating bubo in which they advise early opening for evacuation of pus on the ground that if the bubo be non-virulent it is better to let it out, and if virulent the sooner it is out the better for the patient. Now, as a matter of fact, those who have made comparison in large number of cases of buboes operated upon early and

those operated upon late by a small puncture and thus evacuating the pus or allowed to open themselves, the length of time of healing is decidedly in favor of the latter class of cases. Then, too, if the bubo be virulent it is by operation converted into a large chancroid, leaving the patient a greater chance of further inoculation from the virulent pus; whereas if the bubo remains unopened there comes a time when the contained pus loses its virulency and may be safely opened by a small puncture, the cavity washed out with hydrogen peroxide and then distended with a 10 per cent. iodoform ointment, when it will rapidly go on to heal, or it may even be allowed to open spontaneously. There may be exceptions as there are to every rule laid down too absolutely; at the same time the present tendency is not to interfere too early in these cases, unless complete enucleation is attempted before the suppurative stage.

In their treatment of early syphilis the authors advise suspension of mercurials after subsidence of symptoms until a fresh outbreak makes renewal of the mercury necessary. Patients sometimes take this into their own hands by leaving treatment when symptoms have subsided and return when they have fresh exacerbations. Our own observation of cases treated by this method leads us to believe that the continuous treatment of syphilis for a much longer period by mercurials, say two years, even when no symptoms are present, is better in the majority of cases, for the reason that we have seen a majority of these cases go their entire period of treatment having absolutely no recurrence of symptoms after the first outbreak, and our belief is that these patients do best in whom this recurrence of symptoms is prevented.

The authors speak of intramuscular injections of mercurials only to mention the use of calomel by this method and are inclined to decry its use. There are cases where injections of mercury do better than any other method, and a good description of the various methods employed would have been of value.

The work is somewhat marred by a too free use of italics, in many instances entirely useless.

Simple and Chronic Specific Urethritis.—By J. HENRY DOWD, M.D. A. W. Landeittel, Buffalo, N. Y., 1901.

This small volume is valuable because the author gives us the results of his own observations in the treatment of this disease and is not padded out with a mass of material found in other text-books. It is a pity that the work is so cheaply put together and is so full of typographical errors. It is a small volume easily carried in the pocket, and contains a number of valuable hints.

G. K. S.

Society Transactions.

THE DERMATOLOGICAL SECTION AT CHELTENHAM.

(BRITISH MEDICAL ASSOCIATION.)

REVIEW BY NORMAN WALKER, M.D., F.R.C.P.E.D.

(*Scottish Medical and Surgical Journal*, October, 1901.)

The principal business was the discussion of the three subjects which may be said to be most prominent at present in the dermatological mind. Sabouraud had come over from Paris to introduce the discussion on the rôle of staphylococci and streptococci in the etiology of skin diseases. In an interesting paper, read in French, but of which a full abstract was supplied to the members, he took the position that there were three varieties which played an important part in cutaneous pathology.

Streptococclc Infection.—The streptococcus of Fehleisen is the cause of the impetigo contagiosa of Tilbury Fox. This may be said to have been pretty generally accepted. Gilchrist, of Johns Hopkins, and most of the active cutaneous pathologists have verified Sabouraud's work, and in Edinburgh, too, I have found that in the majority of cases of impetigo one could get cultures more or less pure of streptococci. Unna remains an opponent of this theory, maintaining that the disease is due to a staphylococcus, and he has published several papers supporting his views.

It is certainly very remarkable that an organism so virulent as the streptococcus should be responsible for such a benign disease as impetigo, but Bullock and others have demonstrated the infinite varieties of virulence associated with this organism.

The organism second in importance according to Sabouraud is the staphylococcus aureus, which produces pustular lesions upon the skin, generally, he says, perifollicular. It is responsible for a formation of boils, and, indeed, this staphylococcus may be said to be responsible for most of the purulent skin affections.

The third organism is a white coccus, for which Sabouraud suggests the name of the staphylococcus cutis communis. As it is obviously and admittedly the organism described by Welch, of Baltimore, as the *S. epidermidis albus*, it seems a pity to rechristen an already baptized child. According to Sabouraud, this organism is found in almost every skin; indeed, is the most common organism there found. It is the one which Unna has described as the *morococcus*, and Sabouraud believes that it is responsible for all the scaly eruptions. Malassez spores (*Unna's flask bacillus*) is, according to him, only a degenerated form of this micrococcus.

Sabouraud was followed by Galloway, who held that even greater simplicity might be introduced; practically he recognized only a streptococcus and a staphylococcus, for he believes the production of color to be of only minor importance as a distinction. He regards the *S. epidermis albus* as practically the same as the common *S. albus*, and pointed to the extraordinary variance in virulence of

the streptococcus as being much greater than that which it was necessary to assume in these staphylococci. Whitfield maintained the distinction between the *S. epidermis albus* and the *S. pyogenes albus*, the latter of which liquefies gelatine very rapidly, the former very slowly, if at all.

The determining of differences between the numerous varieties of cocci found in the skin is undoubtedly extremely difficult. While Galloway stands at the one extreme, Unna may be placed at the other in recognizing minor distinctions of color, rate of liquefaction, chemical reaction and the like as indicative of important differences in the organisms. The reactions of the skin vary so greatly in different conditions that it seems quite possible that these are associated with what may be minor, but still are important differences between different species of staphylococci. It was somewhat remarkable to note that both Sabouraud and Galloway, while dwelling on the importance of these organisms in many conditions, were both extremely anxious to make it clear that in their opinion the lesions of eczema were amicrobic.

It cannot be said that much came of the discussion beyond the acceptance of the relationship between the streptococci and impetigo contagiosa, but many ideas were suggested, and will, doubtless, form useful guides to work which may lead to more definite conclusions at the meeting next year in Manchester.

Phototherapy.—On Thursday the section was crowded to hear the discussion on the different forms of light treatment. This was introduced by Mr. Malcolm Morris, fresh, or perhaps, one should say fagged out, from his busy week as Secretary-General of the Tuberculosis Congress, who briefly put before the meeting his experience in reference to the Finsen method of treatment. He was good enough to distribute reports of an article which appeared some time ago on the subject, so that one could follow his views at leisure.

He is a firm but not rabid believer in the new method of treatment, and he showed some patients and illustrations which demonstrated even to the most sceptical the value of the treatment. The advantages of the method were, he said, its reliability, its painlessness, and the excellent cosmetic results. The disadvantages were the long time required for treatment and the expense, which I am told by one thoroughly experienced in treating large numbers of cases works out at between 6s. and 7s. per patient per day.

Mr. Morris was followed by Dr. Sequeira, who is in charge of the Light Treatment at the London Hospital, and he gave the excellent statistics of his experience, for the London Hospital has the largest installation in this country; one lamp having been presented by the Queen, one by the directors, and the third by the proprietors of the *Daily Mail*. Each of these is capable of treating four cases at a time, and thus between sixty and seventy patients are treated daily. It is unnecessary to give any further details as to their statistics, for the success of this method is admitted. What has militated against it is its enormous expense, but Dr. Sequeira demonstrated an apparatus with which they had had at least as successful results, and which was procurable at a cost within the reach of any small provincial infirmary. It is a modification of an apparatus designed by MM. Lortel and Genoud, and it is undoubtedly greatly improved by the English modification.

Finsen commenced his light treatment by using the sun, and since the sun is as rare in Copenhagen as it is in this country, he was driven to electric light as a substitute. Imitating too closely his example, he hung his imitation sun up in the middle of the room and focussed the rays down on the patient. The

French inventors place the patient and the light close together, and thus the costly and cumbersome arrangements of rock crystal lenses is dispensed with. The apparatus consists of a small arc lamp, such as is used in an electric magic lantern, which is kept cool by a constant stream of water; the whole is surrounded by a water jacket, and Dr. Sequeira has so arranged his modification of the Frenchmen's apparatus that one stream of water suffices to keep the whole cool. The extent of surface treated at a time is nearly four times as great as that treated by Finsen's apparatus, and the desired effect is produced in something like one-third of the time.

A still cheaper apparatus was shown in the exhibition by the Dowsing Radiant Heat Company, but it had not the advantage of universal mobility which Dr. Sequeira's apparatus has.

Dr. Brooke spoke on the advantages of the Finsen method, and with him apparently the limit of personal experience in this country was reached.

The discussion then drifted on to the X-ray method, or rather Dr. Sequeira concluded his remarks by a reference to it. To him belongs the credit of having, partly by accident, discovered the extraordinary effects of the X-rays in rodent ulcer. A case was sent to him by Mr. Jonathan Hutchinson, Jr., for the purpose of treatment by Finsen's method. (It should be mentioned that Finsen has treated several cases of rodent ulcer by his method.) The parts were so sore that Dr. Sequeira hesitated to use the method, and thought it well to try the effects of the X-rays as a preliminary treatment. The results were surprising, the ulcer healed up, and since then many cases have been treated in different parts of the country, and when the rays are properly applied, with invariably marked benefit. The improvement worked by this treatment almost requires to be seen to be believed, especially when one remembers that is efficacious not only in the slight cases, but also in those which are far, far beyond the reach of the surgeon.

There were present a considerable number of X-ray experts, who discussed the matter from the standpoint of the electrician. There seemed to be a general accord that hard tubes had a more excellent therapeutic effect than soft, which were more liable to cause dermatitis.

Dr. Blacker, who followed Dr. Sequeira, and who speaks with authority as an expert electrician, was extremely discreet in his praise of the method, and formed an admirable contrast to some writers who were apparently of opinion that in the X-rays has been found a panacea for each and every disease, not only of the skin but of the other organs as well. In speaking on the discussion I took occasion to point out that while a firm believer in the efficacy and usefulness of both the methods of light treatment, that their combination with the older and familiar methods was likely to be followed by much more rapid cure than when slavish devotion to the new methods excluded all other treatment.

In my own experience the rays are the most suitable treatment for the very widespread cases of lupus. They are the only treatment suitable for extensive rodent ulcer, but in more limited cases of lupus, where the appearance has to be greatly considered, then the Finsen method, with its extremely perfect scar, is to be preferred.

Seborrhea.—On Friday the discussion was on seborrhea, and was opened by Colcott Fox, who gave a historical résumé of the subject, interesting and suggestive as his communications always are. He was followed by Sabouraud, who

gave a demonstration of plates and lantern slides of his illustrative views on the subject.

He defines seborrhea as a hypersecretion of the sebaceous glands, and he believes this to be due to the growth of a specific bacillus, which may be found in very large quantities in the little greasy plugs to be found in the mouths of the glands. He says: "Seborrhea (in its etymological sense—flow of sebum) is the hypersecretion of the sebaceous gland. It is only this: seborrhea is never scaly, it is always and exclusively fatty."

This quotation illuminates the difficulty one had in discussing the paper. It is all very well for Sabouraud to say that other views, and he certainly did not spare some of the distinguished investigators on the subject, are incorrect, but by taking back the word to its etymological sense, he begs the whole question. These other observers may be wrong, but it still remains the fact that the term seborrhea is commonly and generally applied to the scaly eruption on the scalp which is known as dandruff, and when Sabouraud says that Unna is wrong in attributing any importance to his morococcus as a cause of seborrhea, and in another place that the *S. cutis communis*, which he believes to be Unna's morococcus, is the cause of all scaly eruptions, it would seem that they are not so very far apart after all.

Leaving aside names for the moment one may briefly summarize Sabouraud's views as follows: that there is a minute bacillus, which growing in the mouths of the sebaceous glands stimulates them to produce an abnormally fluid secretion. In severer cases the mouth of the gland is plugged, and we have the disease known as acne, and he believes that all forms of acne are due to this organism, plus, in the suppurating cases, the staphylococcus aureus.

Unna, on the other hand, regards the morococcus as the principal pathogenic agent, and seeing its power of producing scaling, admitted by Sabouraud, which is, after all, a mild form of inflammation, it seems a likely enough candidate for the honor of being the cause of the disease.

Cultivation of this organism of Sabouraud's is difficult. In many efforts I have only once succeeded in getting a colony in any way resembling those he demonstrated at Cheltenham, but as he was good enough to give me a couple of his tubes I trust to be more fortunate in future. They require an acid medium, and the growth is of a dirty red color.

The whole subject requires elucidation. Until authors are agreed as to the meanings to be attached to a particular name, it is obviously useless discussing it. Sabouraud's seborrhea ends in acne, Unna's in psoriasis, and it would surely be well to have as hard and fast a line as possible drawn between two such obviously dissimilar diseases.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

*Wednesday Evening, October 16, 1901.*W. K. OTIS, M.D., *Chairman.***Nephrectomy for Multiple Renal Calculi.**

DR. JOHNSON.—Mr. Chairman and Gentlemen of the Section: The first patient whom I show to you is a young man 19 years of age, who came under my care on the 14th day of August of this year.

During the past five years he had suffered from very characteristic symptoms pointing to a stone in the left kidney. He had had frequent attacks of severe renal colic on that side. His urine had been constantly purulent and on several occasions he had passed small calculi by the urethra.

At the time of his admission to the hospital he was suffering from a moderate daily rise of temperature of a mild septic type. His general health had suffered considerably; he had more or less constant pain and soreness in the region of the left kidney and on the day before I operated on him he passed two small renal calculi. There was tenderness on pressure over the left kidney and the organ was perceptibly enlarged. Several X-ray pictures which were taken in the hospital showed the presence of at least two large calculi in the left kidney. The operation of nephrectomy was done on August 19th.

The incision used was made parallel to the free border of the ribs and an inch below that line, beginning at the outer border of the right rectus muscle and extending outward as far as the outer border of the erector spinæ. This incision possesses certain advantages. The exposure of the pedicle of the kidney in front is such that the vessels can be ligated under the control of the eye by means of ligatures of catgut passed with an aneurism needle.

This can be accomplished early in the operation and the subsequent enucleation of the kidney can then be done in most cases with very little loss of blood.

If desired, a small or large opening may be made in the peritoneum in front and the other kidney examined with the fingers and its size and consistency determined, or its absence noted. If desirable the nephrectomy may be made intra-peritoneal.

The dependant portion of the wound forms an excellent avenue for drainage. Through this cut also the ureter may be removed with ease as far down as the brim of the pelvis.

Upon exposing this kidney it was found to be notably enlarged. The secreting substance of the organ was almost entirely gone. The mass consisted of a thick walled sack, thinned out over certain areas to the thickness of blotting paper.

The contents of the sack could be felt to consist of two large calculi and of two or more tablespoonsful of smaller stones, which subsequent examination showed to vary in size from that of a buckshot to fine granular detritus.

The enucleation of the kidney was not difficult, but an anomalous vessel which entered the organ at its upper pole bled actively and required a separate ligature.

The wound was closed, except at the posterior angle, where a mass of sterile gauze was inserted for drainage.

As you see, the remainder of the wound healed per primam. The patient's

convalescence was rapidly established and at present, after two months, he is in good health. His urine is almost entirely free from abnormal ingredients; his abdominal wall is firm; he is not obliged to wear a belt, hernia being very rare after incisions in this situation.

Acute Suppurative Pyelo-Nephritis. Nephrectomy.—A. B. JOHNSON, M.D.

The patient to whom this kidney which I show you belonged was, I am sorry to state, unable to be present this evening on account of the illness of one of her children, but with the permission of the Society I will relate the history of the case and exhibit the specimen.

I saw her first on the 9th day of August of this year. She is 28 years of age and the mother of six children. Her last child was born 17 days before she came under my care. The labor was normal but retention of urine followed, and a catheter was passed on several occasions by her physician. A sharp attack of cystitis came on within a few days and was followed almost at once by pain and tenderness in the region of the left kidney. Severe constitutional symptoms also accompanied this pain—prostration, chills, fever and sweating.

When first seen by me on August 9th she appeared to be very ill. Her temperature was 105° Fahr.; her pulse 130.

The pelvic organs appeared to be normal on palpation; there was rigidity of the muscles and exquisite tenderness in the left hypochondrium.

These signs were absent upon the right side.

Her urine contained a few pus and blood cells and a small amount of albumen; otherwise normal. There was a leucocystosis of 20,000.

Her kidney was removed upon the following day. Under ether the enlarged lower pole of the left kidney could be felt.

It was removed by an incision parallel with the ribs, as in the other case.

Palpation of the opposite kidney through an incision into the peritoneum was negative. The left kidney was removed without difficulty. The loss of blood was trifling in amount. The wound was closed by sutures except at the posterior end, where gauze was inserted for drainage. Shock was not noticeable. The patient's temperature fell from 105.2 at the time of the operation steadily to 99, which was reached on the third day. Her convalescence was not interrupted by any untoward symptoms. The kidney, removed, showed the following lesions.

The organ was moderately enlarged, the enlargement being confined to the lower half, with one or two small rounded swellings visible on the surface of the organ near the upper pole. Over the swollen portion the surface was rough and of a light grayish color, showing scattered numerous yellowish white areas varying in size from the head of a pin to that of a number 5 bird shot.

Upon section the swollen and infiltrated areas were seen to contain very numerous minute foci of purulent infiltration corresponding in size to the yellowish white areas visible upon the uncut surface. From these infiltrated areas fine yellowish streaks could be traced running toward and into the pelvis of the kidney. The surface of the mucous membrane of the pelvis and the ureter did not appear to be markedly inflamed upon gross inspection.

The remainder of the parenchyma of the organ appeared to be in the condition of acute nephritis.

There were no broken-down areas of macroscopic size.

The condition of acute suppurative pyelo-nephritis as an ascending infection from the bladder is unfortunately only too frequent; but it does not often happen

that we have the opportunity to operate upon a kidney at this early stage. In my own experience I recall no other similar case in which operation was done at so early a stage of the disease, and in making inquiries among my surgical acquaintances who have had considerable experience in the surgery of the kidney I find that in their experience also such cases are uncommon.

This woman's condition was grave. Had the operation been delayed until abscess formation had rendered nephrotomy practicable the chances of recovery from the profound septicemia already existing would have rendered her recovery extremely doubtful.

DISCUSSION ON DR. JOHNSON'S CASES.

DR. GUIERAS.—Both of Dr. Johnson's cases are very interesting. In the first case, the patient from whom he removed the kidney on account of nephrolithiasis. I would say that I think as a rule, if a kidney is not much destroyed by a calculus, it is better to do nephrotomy than nephrectomy. My reason for this is because renal calculus is usually due to a diathesis, and if a stone is formed in one kidney similar conditions may give rise to one in the other kidney. I do not doubt, however, that in the patient presented by Dr. Johnson the kidney tissue was sufficiently destroyed to warrant a nephrectomy. The incision in this case, as marked by the scar, transversely around one side of the body, is rather longer than is usually required, and if we make such an incision without knowing just the condition of the kidney that we are to find, and after exposing it see that it is a case for nephrotomy, rather than for nephrectomy, we may possibly feel that we have more tissue than we care to expose to the infection coming from the kidney, and besides we run a greater risk of cutting the peritoneum and allowing infection to enter its cavity than in the ordinary incision in the line of the rib, or extending from the rib downwards and curving a little to the outer side.

The specimen of the kidney taken from the patient suffering from pyelonephritis, which Dr. Johnson showed, brings to my mind some cases that I have recently had under observation. The first case was that of a woman with pus in her urine, renal elements and pain in her right lumbar region, who had been running a temperature for some time before entering the hospital. I operated upon her and removed a kidney full of multiple abscesses, which I presented to the Genito-Urinary Society. Some of these abscesses were surrounded by so much inflammatory tissue that they resembled other conditions, and some of the gentlemen present thought that they might be gummata of the kidney. It was, however, a case of pyelo-nephritis, due to an ascending infection, similar to the case referred to by Dr. Johnson.

Another similar case was that of a woman whom I was called to see just after childbirth, and was operated upon by me a few weeks ago. She was running a septic temperature, her urine contained pus and renal elements and the kidney was markedly enlarged on the right side, extending down toward the iliac fossa. On the way to the hospital she sank into a collapse, and on entering had a temperature of 105+ and a pulse of 150. The kidney had ruptured during the journey. I operated upon her on the following day and found the ruptured cavity. The pulse and temperature then dropped. In a few days, however, they went up again, and I found that she had abscess of the broad ligament on the same side, which I opened and drained, and yet the temperature continued elevated. I then removed the kidney, and although I had needled the kidney, palpated it, and

probed the cavity from which the pus had been evacuated, and could feel no stone, after its removal I found a stone present, and a connection between the abscess cavity in the first instance and the cavity containing the stone, which was so tortuous that I had to bend my probe to enable me to pass it from the cavity and feel the stone. The patient died later on of sepsis.

I have recently had under treatment a man who was sent to me with the diagnosis of stone in the right kidney. He had all the symptoms of nephrolithiasis on the right side, a marked phosphaturia, and at times phosphatic casts of the calyces of the kidneys. He had blood and pus in the urine, pain in the right loin, although he had never had any attacks of renal colic. The urine contained gonococci, and to ascertain if these were from an infection in the urethra or bladder or higher up, I catheterized the ureters and found that the urine coming from the kidneys also contained this micro-organism. The patient was mildly septic and has, I believe, an ascending pyelonephritis and I expect to be able to present his kidney here later. His last attack of urethritis was 14 years ago.

DR. HOWARD LILIENHAL.—I congratulate Dr. Johnson on the management of the first case and must differ from Dr. Guiteras in the indication. It seems to me that in that particular instance nephrectomy was a wise thing to do, because it was a chronic disease with numerous stones present. The kidney was thinned in some places to the thickness of blotting paper. And surely, too, the operation could be done very much more easily and safely as a primary procedure than at a secondary operation.

The X-ray pictures are remarkably good.

As to the second case I am a little in the dark as to why Dr. Johnson did not perform simple primary nephrotomy. He admits that he could not be certain that the other kidney was not infected. The fact that it was not tender or painful is of little or no significance. It seems to me, also, that one or more pretty free incisions into the inflamed organ might have been conservative and that Dr. Johnson would possibly still have had time within the next two or three days to take out the kidney in case the patient was not doing well. As it was, he took a pretty large risk in removing the kidney primarily.

I reported a case at the Surgical Society five years ago, which will be found recorded in full in the *Annals of Surgery* of about that date, in which there were multiple abscesses of both kidneys secondary to an erysipelas of the face. The patient got well after repeated openings of these small abscesses and got well without nephrectomy on either side. The man has remained well.

DR. JOHNSON.—In regard to the criticism of this incision parallel to the ribs I have already explained why it is preferred by certain surgeons, including myself, to incisions made in other ways. I did not regard it as safe to catheterize the ureters of this woman for fear of carrying infection to the other kidney, nor should I do so in another similar case. I do not regard catheterization of the ureters in cases of such acute infection as an entirely harmless procedure by any manner of means.

I did not incise the woman's kidney merely because her condition after such an incision would have been but little better than before the operation.

There was no abscess to evacuate and the source of poisoning from which she suffered could only be removed by taking out the entire organ, and it appears to me that the result obtained entirely justifies me in this conclusion.

In the case of the young man the kidney which contained the stones had

long ceased to exercise any useful function. Its prompt removal spared him a prolonged and tedious convalescence, a very possible failure of wound healing in the end, together with the great dangers and difficulties which almost always accompany secondary nephrectomies in these cases.

The Diagnosis and Treatment of Prostatic Hypertrophy, with Remarks on Complications Before and After Operation.—By RAMON GUITERAS, M.D., New York.

The author reviews in detail the symptomatology of prostatic hypertrophy, with special reference to that phase of the clinical history when the patient seeks surgical relief, when the pain and spasm and the frequency of urination become troublesome. In speaking of the diagnosis of prostatic hypertrophy he emphasizes the possibility of the presence of an elongated prostatic urethra without much enlargement of the prostate as felt by rectum, the hypertrophy growing upward and backward, and making the vesical base of the gland higher up than the rectal. Increased length of the prostatic urethra is measured clinically by determining the length of catheter which must be passed in order to draw off urine, the normal being eight inches. The length of the urethra may also be determined by a stone searcher introduced into the bladder with its beak downward.

Examination of the urine is very important in these cases, as it gives a clue to the existence of cystitis and of affections of the kidneys which are of importance when balancing the advisability for operation. It is necessary in doubtful cases to test the capacity of both kidneys by ureteral catheterization, followed by the examination of the urine from each kidney. Operations are contraindicated when renal lesions other than transient exist.

The complications influencing the patient to seek the operation are chiefly epididymitis, hæmaturia, and urethral fever.

Stricture of the urethra is rare in prostatic age, and the symptoms in such cases are usually due to the prostatic-urethral impediment. Valvular lesions of the heart and fatty heart may be present. They are not complications, but must be considered in weighing the possibility of an operation. The operation may be borne well if there is compensatory hypertrophy with a valvular lesion. An involved bladder, it must be remembered, does not count as much against operation as involved kidneys, as the former can be restored to comparative health by palliative preparatory treatment before the operation.

This preparatory treatment need take but little time if the bladder and kidneys are in good condition and if there is not much residual urine, the reverse being the case if these organs are involved and if the residuum is considerable. If the patient comes with an attack of acute retention the first thing to do is to treat the attack. The urine should be drawn off gradually, not all in one catheterization, in order to prevent uremia. Not more than 16 ounces should be withdrawn at first, and at intervals of a few hours at a time about 12 ounces of urine are to be withdrawn until the bladder is empty. As a rule, a case of complete retention should have the catheter introduced 4 times daily if there are 12 ounces of residual urine, 3 times a day when 8-10 ounces are present, twice a day when 6-8 ounces are present, and once a day when below 3-6. After the bladder has been emptied in cases of retention, the catheter should be passed, at first every 4, later every 5, and afterwards every 6 hours. If cystitis be present the bladder should be irrigated twice daily with boric acid solution and once every other day with a solution of silver nitrate, and the

urinary antiseptics mentioned below should be administered. As a rule, a patient should not be operated upon until he has been broken into catheter life. If the kidneys in addition are involved, the patient should have a milk diet, diuretics, nitroglycerin, large quantities of water, and perhaps some of the urinary antiseptics, such as urotropin, salol, sodium benzoate, etc.

The patient having been thus prepared by a course of palliative treatment, is put into the best possible condition for the operation. Before the anesthetic is administered the bowels should be well cleared with an enema and the bladder washed out.

After considering the technique of the Bottini operation in a brief summary, the author then passes on to the after-treatment and the complications after prostaticotomy. After the operation the catheter should be passed at intervals to see whether enough urine is secreted, if there is no spontaneous urination. If there had been complete retention before the operation, the best way is to tie in a catheter and let it remain plugged, the plug to be withdrawn six times a day for urination. Large amounts of water should be drunk, and urotropin or salol in doses of gr. x t.i.d. should be given. In addition, at the end of 24 hours, if the quantity of urine be small, a diuretic mixture containing potassium acetate and spirits of nitrous ether should be given three times a day. Mild hemorrhage is treated by flushing out the bladder with hot water, and severe bleeding, which is rare, must be treated by a perineal section and the introduction of a large tube around which gauze is packed. If cystitis be present after the operation it should be treated in the way indicated above. The result cannot be properly estimated until the sloughs are passed off entirely, in about four weeks after the operation.

The methods of prostatectomy devised by the author, namely, the vesico-rectal and perineo-pre-vesical are then described. The vesico-rectal method begins with a suprapubic cystotomy, after which the index finger of the right hand is introduced into the bladder, while that of the left palpates the prostate from the rectum. A pair of sharp-pointed scissors is then introduced into the bladder, and the capsule of the prostate is incised. The gland is now enucleated with the finger, and the floor of the urethra incised to prevent the formation of a pocket. An external urethrotomy is next performed and drainage established through a tube inserted into the bladder, the latter being sewn up tightly to the drain. This is the quickest way to perform prostatectomy. The perineo-prevesical method consists in making an incision suprapubically and making pressure upon the prostate through the unopened bladder, while the prostate is enucleated with the index finger after incising the capsule with a pair of scissors through an external perineal urethrotomy wound.

Perineal drainage is established after the operation, the skin and fascia being sewn close to the tube. This is the safest method of prostatectomy yet devised. After prostatectomy the patient should be stimulated, and given saline enemas. During the operation there is a great deal of shock, and the author has noticed that there seems to be a climax of shock at the moment when the prostate is removed. It is best to anticipate shock and to administer stimulants, etc., before it comes on. Very hot water irrigated into the hollow where the prostate has been will usually stop the bleeding. If not, the drainage tubes should be carefully packed around with gauze. After prostatectomy, as well as after prostaticotomy, it is important to keep the kidneys active by means of diuretics, plenty of water, etc.

The drainage should be carefully watched, and if found insufficient, the bladder should be flushed out from below. The perineal drain should remain in situ for three weeks, after which a retained catheter should be passed into the urethra, to remain probably until the perineal wound has closed. A temperature indicates, when present after an operation, that the drainage is insufficient, or that infection has taken place. In such cases it is best to use urinary antiseptics, to wash out the bladder, and to look after the drains, and to employ general treatment. Epididymitis is sometimes a complication of these operations, and should be treated in the ordinary way, care being taken to treat the cause,—the insufficient drainage and infectious urine. Neurasthenia sometimes follows the removal of the prostate, and can be compared to the change of life in women.

The indications for operation, especially the choice of the operation are influenced by a series of clinical factors, which are exhibited in the following table: Under the heading "Catheter Life" are grouped those factors whose presence would incline the surgeon to select palliative treatment for his patient.

FACTORS GOVERNING THE CHOICE OF TREATMENT.

INDICATION.	PROSTATECTOMY.	PROSTATOTOMY.	CATHETER LIFE.
1. Age.....	Under 70 years.....	Any age over 50.....	Any age over 50.
2. Kidneys.....	Normal.....	Fairly healthy.....	Considerably diseased.
3. Bladder.....	Fairly healthy.....	Fairly healthy.....	Atonic.
4. Prostate.....	Markedly enlarged as felt by rectum.	Moderately enlarged as felt by rectum.	Any size.
5. Urethra.....	Decided impediment. Elongation of canal.	Distinct impediment.....	Catheter passed without difficulty or complication.
6. Residual Urine.....	Over 4 ounces.....	Same.....	Same.
7. Special Symptoms..	Frequency in urination. Pain, tenesmus, burning.	Same.....	Same. Heart feeble and arteries diseased.
8. Complications.	Attacks of urethral fever, epididymitis and hæmaturia. (Kidneys normal.)	Same, but kidneys only fairly healthy.	Same, but kidneys too much diseased for operative procedure.

The results of each operation upon the prostate are next compared. The author found that the figures collected by him show in 753 cases 622 cures, 44 deaths, and 87 failures with prostatotomy (Freudenberg), and that with prostatectomy there were in 152 cases collected by the author 121 recoveries, including cures, successes, recoveries, good results, and improvement, as the case may be, according to the term used by the author reporting the case, 25 deaths, and 6 failures. In other words there were in prostatotomy 86 per cent. cures, 5 $\frac{1}{2}$ per cent. deaths, and 11 per cent. failures, while in prostatectomy there were 79 per cent. cured and improved, 16 $\frac{1}{2}$ per cent. deaths, and 3 per cent. failures. The mortality of prostatectomy is therefore three times as great as that of prostatotomy, but in those that survive the results are more frequently successful. The results of prostatectomy are also more permanent and satisfactory than those of prostatotomy. If we obtain a relief of the symptoms and a

relief of the obstruction, leaving perhaps one-half ounce of residual urine, the patient may be considered cured from the surgical standpoint.

The author summarizes the whole subject in the following conclusions:

1. That the general practitioner should be educated to palpate the prostate and to use the other simple means of diagnosis employed in determining the shape and size of the organ.
2. That the prostate corresponds to the uterus in the female, pathologically speaking, and therefore the examination of the male organ is just as important as that of the uterus in the female.
3. The care of the bladder in prostatics is the prime factor in their preparation for operation. The patients should be trained before such operations to observe the details of catheter life, and the urine and bladder as well as the kidneys should be rendered as normal as possible, before the operation is attempted.
4. Before every prostatic operation the patient should be thoroughly examined, including an examination of the heart, arteries, urine, bladder, urethra, and kidneys.
5. The successful cases belong most frequently to the class having a smaller amount of residual urine and a moderate prostatic enlargement, and early diagnosis, and operation if necessary, are the best plans.
6. That the choice of the operation should be made according to the lines laid down in the present article; according to the age, the resisting power of the patient, and the size and shape of his prostate, with special reference to the situation of the hypertrophy, together with the condition of his kidneys and bladder.
7. In the conduct of the operations the first object is to avoid shock and to prevent congestion of the kidneys by precautions during, and the proper treatment after, the operation.

DISCUSSION.

DR. FERD C. VALENTINE.—It is regrettable that so important a subject could be presented only in synopsis. Still the author is to be congratulated on his ability to give in the short time permissible so exhaustive a sketch from the vast library that constitutes our present knowledge of prostatic enlargement. No doubt he counted upon the discussion to bring out many of the points whose omission is compelled by the necessary brevity of his paper. Among these is his sketch of the symptoms. He mentions only spasm and frequency of urination. It is perfectly true that these are the symptoms which bring the patient to the operator, but unfortunately, when these manifestations have arisen, the condition is often associated with involvement of the higher urinary tract. On the other hand, but few, if any, patients would consider operative measures when the first symptoms of prostatic enlargement arise. Delay in starting the stream, reduction of projectile length, diminution of its parabola, nocturnal urination unless very frequent, and even incomplete evacuation of the bladder, as they develop gradually habituate patients to this infirmity, so slowly that they hardly look upon it as a disease for which to seek relief. When, however, the catheter, for any reason, ceases to be useful or safe, then operative measures are certainly required.

It would have been exceedingly satisfactory if the author could have incorporated into his paper his views in extenso on the precise indications for the various operations employed for the cure of prostatic obstruction.

His description of enucleation makes the operation appear exceedingly simple. Those who have been fortunate enough to witness his performance thereof are certainly convinced that it is simple—in the hands of so skilled an operator as the author is.

A word about the author's plan of treating urinary retention: He, like all others engaged in special work, often has cause to regret that the operation is not performed with the precautions absolutely necessary to avoid the disastrous results of sudden emptying, even when the catheter is most skilfully passed. Among the results the one most to be dreaded is vesical hemorrhage *ex vacuo*. While I repeat his warning to emphasize it, I do not fully agree with his method. By his plan of gradually emptying the bladder he leaves possibly infected urine in the viscus for hours. Even in a normal bladder the risk of injury by the presence of abnormal quantities of urine is too great to incur.

The plan I follow in all vesical retentions has in view removal of all the urine as quickly as possible, without allowing the bladder to collapse and without sudden contraction. This is accomplished by withdrawing 60 c.c. of urine and injecting 30 c.c. of warm boric acid solution; then allowing 60 c.c. to escape and again injecting 30 c.c. of boric acid solution. This process is repeated until absolutely nothing but clear boric acid solution flows from the catheter. A small quantity of boric acid solution is left in the bladder, which has been thoroughly, albeit so gradually emptied of urine that no violence is done it.

DR. HOWARD LILIENTHAL.—I have been forestalled by Dr. Valentine in what I wanted to say concerning the evacuation of an over-distended bladder. Most cases of cystitis depending on impairment of drainage may be quickly cured by emptying the bladder with the catheter every three hours, day and night, for two or three days, whether the patient feels the need of the catheterization or not. This method is, of course, only suitable to such cases as will permit the easy introduction of the instrument. Then, too, much may be accomplished in addition by the internal administration of urinary antiseptics and the ingestion of large quantities of water. Since employing this treatment I wash out comparatively rarely. Washing of the viscus may, of course, be indicated when there are large quantities of mucus which cannot be otherwise evacuated.

DR. FRED. BIERHOFF.—One symptom Dr. Guiteras has not touched upon in his very admirably arranged paper on this subject, which we may have frequently in cases of prostatic hypertrophy, especially those cases that are complicated with cystitis, and that is severe hæmaturia, which may be to such an extent that patients pass not only, as the speaker has said, urine frequently, but also clots, or blood in suspension. That occurs only, I have reason to believe, in those forms of prostatic hypertrophy in which the process is complicated with congestion, or inflammation of the mucous membrane covering the prostate, just at, or near, the vesical sphincter.

Another point is the value of cystoscopy prior to any cutting operation within the unopened bladder. Personally I believe, and that belief I have reason to know is shared by Freudenberg and others who do much of the Bottini, that no one is justified in doing a prostatotomy, especially a Bottini, without first having satisfied himself as to the exact contour of the parts projecting into the bladder, for the simple reason that, in order to have the maximum of result, we must know at what point of the prostate to make our incision. We find frequently that not only the median and the lateral lobes of the prostate are hypertrophied, but it often happens that the anterior lobe takes part in the process, forming a sort of tongue, projecting from the anterior side of the vesical neck, which, at times, will aid in obstructing the outflow of urine. It is, at times, even found necessary to make an incision in this anterior lobe also.

Another point upon which, I believe, too little stress was laid was upon the

indications for operative treatment and those for non-operative. We all know a great percentage of these cases can be very decidedly improved and made exceedingly comfortable, carried along for years, without any operative treatment beyond attention to the cystitis, and other tentative, local measures.

DR. GUIERAS.—If one were to go fully into the interesting subject of prostatic hypertrophy, it would be impossible to present a paper to cover the diagnosis and operative treatment. I did not take up the consideration of the symptoms, but merely mentioned in one line the subjective symptoms which have usually brought the patient to me.

Regarding catheterization, there is, of course, no fixed rule. Patients have to be governed by the amount of residual urine and by the frequency of desire to urinate. Some men beginning to pass the catheter may have to use it every fifteen minutes, or may even have to tie it in for a few days or weeks; but the table I gave you may be considered a good average one. Cystoscopy cannot always be performed on a patient with a large prostate, as one cannot always introduce a cystoscope into the bladder. I have had patients where the end of the cystoscope would not enter further than the prostatic chamber. Afterwards having inserted a Bottini instrument into the bladder with a great deal of difficulty, and having performed prostatotomy, I have found that I could not pass the same catheter which I had used before the operation to wash out the bladder.

In one such case, in which I performed perineal section afterwards, I found that the right lobe of the prostate was very much enlarged and bulged into the prostatic urethra, forming a convexity. The left lobe, at its middle point, corresponded to the apex of the convexity on the other side, and was concave, although on either side of the convexity it bulged out into the urethra. I accordingly tried to pass my finger into the bladder through the perineal opening, having curved it. After I had passed it in a certain distance it came against the middle lobe, which formed a barrier to the entrance of the bladder, preventing me from entering. I then knew that I had been turning the end of my cystoscope in the tortuous channel or between the middle and the two lateral lobes; and, I could not possibly introduce the tip of my finger into the bladder. It is certain when your cystoscope does enter the bladder, and it usually does, that you can learn a great deal, for very often the prostate has pushed the prostatic urethra out of place and it is the only way to find out just where to make the incision.

Selections.

CUTANEOUS DISEASES AND SYPHILIS.

Impetigo Herpetiformis in Man. —F. GUNSETT (Wolff's Clinic) (*Arch. f. Derm. und Syph.*, Vol. 55, 1901, p. 337).

The author adds one case to the 27 reported to date of his article, making a total of 28 cases, 19 in pregnant or parturient women, 8 in men and one in a woman not pregnant. The writer reports another case in a woman first reported by Maret in 1887, which he does not include as a new one. This case presents this peculiarity that the disease occurred four years after the subsidence of menstruation, starting upon the thighs and spreading gradually over the whole body. She recovered from the attack. Toward the end of 1900, two years after

the last attack, she reappeared with a recurrence occupying the whole body, accompanied with high temperature. In five weeks she recovered. Thus this woman had four attacks of impetigo herpetiformis since 1887, the first two during pregnancy (reported by Maret) the last two long after menopause (reported by the writer).

Gunsett's original case occurred in a man thirty-three years old. The disease started simultaneously on the trunk and mucous membrane of the mouth in the form of small pustules. Gradually it enveloped the breast, neck, arms, hands, forehead, nose, cheeks, scrotum, prepuce and glans penis. A temperature of 38.7 accompanied each new outbreak. Weakness and malaise were very prominent symptoms. No scars remained after the disappearance of the eruption. Recovery took place in five weeks. In considering the differential diagnosis of the disease, the writer taking into account all published cases, is of the opinion that when the following three characteristic symptoms (1) the appearance of outbreaks with chills, (2) remittent fever, and (3) general malaise; are present with the characteristic skin eruption, the diagnosis is easily established. Pregnancy is not a necessary condition for the disease. It can only be regarded as a predisposing factor. In 31 per cent. of all cases impetigo occurred in man and in non-pregnant women. The mortality, judging from all twenty-eight published cases, reaches only 52.7 per cent.

The Treatment of Two Cases of Nerve Leprosy in Which Recovery Took Place.—GEORGE THIN (*Brit. Med. Jour.*, 1901, p. 1074).

An interesting account of two cases. Recovery is attributed by the author mainly to the action of drugs. In the first case leprosy appeared when the patient was five years old. Chaulmoogra oil was applied externally and given internally for a period of nearly three years to such an extent, that the patient's system became so impregnated with it, that the linen even after being washed, the skin, and the hair smelt of it. The author had the opportunity of seeing the patient in his eleventh year—six years after the development of the disease, and then thirteen years later. The only evidence at that time of his having had leprosy was found in the mutilation of the hands and feet and in the incomplete restoration of sensation on some parts of the limbs. He suffered from no pain and his skin was everywhere normal in consistence and color and he had a fine fresh complexion. The hygienic surroundings of the patient were very good.

The second case—a healthy adolescent of a naturally good constitution—had several anesthetic spots on the face, trunk, one on the thigh, and calf.

The patient was seen during the first months of the disease and has been under care for several years. Here the treatment consisted of 5 per cent. of pyrogallic ointment being rubbed into the patches twice daily; a dram-dose gurgun oil being taken twice a day and two minims of Fowler's solution twice daily. In a week the strength of the pyrogallic ointment was increased to 7½ per cent. and this was the strength which was afterwards continued. The author believes that in this instance the pyrogallic acid eradicated the small recent patches of leprosy by killing the bacilli.

An Unusual Symptom in Secondary Syphilis.—A. A. SCOT SKIRVING (*Brit. Med. Jour.*, 1901, I., p. 1077).

In the two cases mentioned by the writer, itchiness of the fauces was present during the early period of syphilis. In both cases the itchiness has appeared very

shortly after the onset of sore throat, about eight weeks after the appearance of the chancre. Marked cutaneous manifestations were present in the one, but none in the second case. In these cases the itchiness was felt most over the tonsils, and also over the pillars of the fauces and posterior part of the sides of the tongue. The other parts of the mouth and throat were not affected. It was not a nerve tickling, but a definite itchiness in every way comparable to the ordinary feeling experienced in the skin, and accompanied by a similar desire for counter irritation by scratching.

Leucoma or Leukoplakia of the Vulva and Cancer.—By H. T. BUTLIN (*Brit. Med. Jour.*, 1901, II., p. 61).

Three short reports of cases of leucoma of the vulva complicated with ulcers which were probably of a cancerous character—microscopical examination only in one case. The plaques on the vulva were precisely similar in appearance, feel, and variety of form to the white plaques which form upon the mucous surface of the mouth. The literature shows that in more than one instance, the vulva and the mouth have been attacked in the same patient presenting the same disease in both situations. If so, the influence of tobacco and of the direct contact of alcohol in the production of the disease loses some of its importance.

A Case of Lupus Vulgaris of Twelve Years' Standing, Treated with Urea and Cured.—By A. H. BUCK (*The Practitioner*, Vol. 67, 1901).

The author, acting upon Dr. Harper's advice (*Lancet*, 1901) to treat tuberculosis with urea, applied the remedy in a case of lupus, where destruction of the tissue of the face, nose and nasal cavities was very extensive. The patient has been suffering with tuberculosis of the joints and face (no microscopical examination) for years, and during one month's treatment with urea the author achieved such a result that he considers himself entitled to look upon the lupus as cured. He prescribed "pure urea" 20 gr. t. d. s. in peppermint water 1 oz. together with maltine $\frac{1}{2}$ oz. t. d. s. The ulcers were dressed with unguent. plumb. iod. The amount of urea was gradually increased until the doses reached one dr. t. d. s. There has been no bad symptom of any kind; on the contrary, the patient felt better. With this method of treatment the author believes he gets at the fons et origo mali, viz., that receptability which exists in patients who are the victims of lupus or any other tubercular disease.

Lymphangioma Circumscriptum Cutis.—HUGO SCHNABEL (Riehl's Clinic, Leipzig.) (*Arch. f. Derm. and Syph.*, Vol. 56, 1901, p. 176.)

The twenty-three-year old patient applied to the hospital for an early syphilitic eruption, hard chancre and roseola, and upon examination, several pinhead to lentil-sized, raised, roundish (quite egg-like) disseminated efflorescences have been noticed in the second right intercostal spaces of the anterior thorax. Their consistency was glottic, resistant, and did neither disappear nor diminish on pressure. In two of the efflorescences minute bright red specks, not disappearing nor diminishing under pressure were noted. No inflammatory symptoms could be seen in the surrounding skin. On rupture a lymphatic fluid of alkaline reaction exuded from the vesicle. The affected portion was excised down to the fascia; and prepared for microscopical examination. No exudation of lymph was noticed, nor did a relapse take place. Microscopical examination revealed in the corium and subcutaneous tissues some lymph vessels and lymphatic channels clogged either entirely or partly, and with degenerated endothelial cells,

which brings about a lymph stasis, a condition tending to proliferation of the endothelium of lymph vessels. He agrees with other writers that we have had to do with a lymphangiectasia combined with a neoplastic process.

Epithelioma Adenoides Cysticum.—M. WOLTERS. (Doutrelepon's Clinic)
Arch. f. Derm. und Syph., Vol. 56, p. 89, 1901.)

A girl of twenty suffering with gonorrhea came under the observation of the author; under the right eyelid a reddish-yellow tumor projecting slightly above the surface and passing gradually into the skin, was noticed. The tumor, as far as the patient could remember, had been present on the face since childhood, and did not cause any pain. It was removed and subjected to a very minute microscopical examination.

The author reviews critically the literature of the subject, endeavoring to solve the question of the origin of the tumor. The origin he ascribes to the epithelial layer of the skin or its appendages. Not only the epithelial layer, but the basal layer of follicles of the sebaceous glands and the interpapillary prolongations may be the points of starting of the growth.

Lupus Erythematosus In Sisters.—S. RONA (*Arch. f. Derm. und Syph.*, 56 1901, 381.)

According to the author there are only two allusions in the literature regarding the concurrence of lupus erythematosus in one family. Therefore his two published cases can be regarded as the first examples of the disease published.

He had the two sisters affected under his observation for a long time, and thinks that a mistake in diagnosis is to be excluded. Regarding the third sister, who also suffered from an eruption, he has no fixed opinion as to the nature of her disease, and he does not regard it as lupus. The family history of the two sisters reveals tuberculosis only in one uncle. In the first sister, twenty-four years of age, the eruption occupied her left cheek and nose; in the second, twenty-eight years of age, the face and scalp exhibited characteristic efflorescences of lupus, combined with tuberculosis of the right eye and perforation of the left membrana tympani. The author gives his statistics regarding the age, the relation of lupus erythematosus to vulgaris. Lupus erythematosus is oftener met with before the age of fifty than after. One patient under his personal observation with lupus erythematosus succumbed to phthisis of the lungs; in two others there was swelling of the glands and a family history of tuberculosis. In 100 cases of lupus erythematosus, which he saw personally, he never noticed lupus vulgaris as a complication.

Multiple Spontaneous Keloids.—VLADYSLAW REISS (University of Cracow).
Arch. f. Derm. und Syph., 56, 1901, 323).

Multiple spontaneous keloids are of very rare occurrence, and the case of de Amicis only can be ranged alongside with the following case of the author's. The patient was a girl of twelve. Nothing can be learned of her family or personal history. The eruption in form of hard, round rose-red tubercles began to develop in the last years, occupying symmetrically the thorax, seventy on the right side and fifty-four on the left side, the left upper extremity, forty-five and thirty-seven on the right upper extremity. Only a few tubercles were seen on the thigh, the crura being free. The tubercles were movable with the skin, of ovoid or roundish form. Over them the skin is rose-red, shining, smooth without any sign of scaling. The nodules are painless. Their sensitiveness to thermal or

tactile irritation diminished. The electrode does not produce contractile movement in the nodule. There were no signs of traumatism or breaking of the continuity of the skin. Three nodules were excised for histological examination. As the patient disappeared shortly after excision, the author cannot say whether scar-keloids appeared on the places. Histological examination revealed the complete intactness of the papillæ, the rete malphigii being normal only here and there. Stratum spinosum was slightly thinned. There was a complete absence of elastic tissue in the nodules, but an intermediary zone where elastin was noticeable, though in very slight amount, was observed by the author. The blood vessels did not show any changes.

A Contribution to Keratoma Hereditarium Palmare et Plantare.—

HANS VORNER (Riehl's Clinic). (*Arch. f. Derm. u. Syph.*, 56, 1901, p. 1.)

After considering the literature of the subject, the author gives the histories of his patients. The foregoing disease affected four generations of a family. Out of forty members of the family, sixteen (40 per cent.) inherited the disease. The youngest member, a boy, fourteen weeks of age, had the disease developed on both palms and soles. Right after birth his palmar and platar surfaces were more tender and the skin smoother than in other infants. From the second to the fourth week of life the epidermis began to show a harshness and a red zone on the borders of the palm and sole appeared. This thickening of the epidermis, in all the extremities, gradually increased, and there was never noticed a desquamation of the epidermis during childhood. The disease exhibited the same symptoms as to aspect and clinical course everywhere. It did not give rise to any inconvenience. All the patients sweat profusely on the palms and soles without exhibiting the same tendency in other portions of their bodies. He asserts that all layers of the skin of the sole are uniformly thickened, and the transformation of the rete cells into horny plates takes place as a whole in a normal mannner. There is no qualitative change. There is no sign of inflammation. He looks upon the whole process as a gigantic growth of the epidermis, which corresponds with the formation of the epidermis of soles of certain animals (bear). The writer then gives a critical and minute differential diagnosis of the foregoing disease and other clinically allied affections.

A Method of Sterilizing Soft Catheters.—By HERBERT T. HERRING, M.B., B.S. (*British Medical Journal*, May 25, 1901, page 1260).

HERRING has devised an apparatus for the rapid sterilization and lubrication (aseptically) of soft catheters. Twelve catheters may be sterilized and lubricated in twenty minutes. Water at the boiling point sterilizes the instruments and liquid paraffin at the same temperature lubricates them under absolute asepsis. A drachm of liquid paraffin thus employed will lubricate six catheters.

Boiling catheters does not injure their fabric any more than other methods of sterilization, if as much. By the method described patients living the catheter life can be assured of using sterile instruments and avoiding infection. The apparatus is fully described.

A. L. W.

Iodipin in Syphilis.—DR. R. CHERNBACH,¹ hospital physician in Husi, Roumania, reports two very severe cases of syphilis in which he used iodipin.

The first case was a woman of twenty-eight, who had deep purulent and ill-smelling ulcerations on the left cheek and on both feet. The patient was weak and emaciated and her general condition was very bad. Yellow mercurous iodide

and potassium iodide were ordered internally and the ulcers were treated locally. After eight days the mercury had to be discontinued on account of the stomatitis which made its appearance. Treatment with iodipin was then commenced. For two weeks the patient received a daily hypodermic injection of 5 cc. (75 min.) of the 25 per cent. preparation. On leaving the hospital her general condition was good.

The second case was a girl of sixteen, affected with the severest kind of cachectic and destructive syphilis. She had large ulcerations on the fauces, pharynx and tonsils. The uvula was completely destroyed. The anemia was severe. She was given yellow mercurous iodide, and the 10 per cent. iodipin was injected hypodermically in doses of 10 cc. 2½ drams). After three weeks' treatment the ulcerations in the throat were cured. The general condition was satisfactory and the anemia was improved.

The author says that (1) the injections were practically never painful; (2) the local reaction was very slight; (3) the action of the iodipin became noticeable in a very short time and in a most remarkable manner; (4) at no time did the injections cause a rise in temperature.

¹(*Medico*, May 1, 1901.)

Epidermolysis Bullosa Hereditaria. with Report of the First Case of the Disease in the Negro Race and Notes on the Blood and Vesicle Cells.—

By HENRY LEE SMITH and THOMAS R. BROWN (*Maryland Med. Jour.*, Vol. 54, 1901, p. 141).

The author's case occurred in a mulatto girl of seven years—first case recorded in the negro. The patient had been subject to the disease since her early infancy. The disease existed in her grandmother, father, brothers and one sister.

On the scalp, buttocks, abdomen, and the extensor surfaces of the forearms and legs pigmented areas were seen. Tense bullæ containing clear fluid and varying in size from a large pea to a robin's egg, were situated mainly on the feet. The exudate of the inner bullæ was slightly blood-tinged. Vesicles of smaller size were irregularly scattered over the feet and the legs.

As the excision of a bleb was refused, the writer cut out a piece of normal skin and the sections showed at intervals along the basal border of the epidermis, a grouping of irregular, deep-staining nuclei, which were surrounded by vacuolic areas. The same layer showed in other places elongated nuclei arranged in more or less confusion (Gilchrist).

The fact that general and local eosinophilia is especially likely to be associated with pemphigus and pemphigoid eruptions, was proved by Dr. Brown's examinations of the blood, not during a fresh outburst of the eruption, where he found in 11,000 leucocytes per cubic millimeter, 42 per cent. were polymorphonuclear neutrophils, 40.6 per cent. small mononuclears, 7.7 per cent. large mononuclears and transitional forms, and 9.7 per cent. eosinophiles. The blood in drying vesicles showed a number of red blood-cells, some polymorphonuclear neutrophils, and not more than 4 or 5 per cent. eosinophiles.

Subsequent Observations Regarding "Multiple Benign Sarcoid of the Skin."

—PROF. CÆSAR BOECK (Reprint, Kaposi's Festschrift: 1900).

In December, 1899, the author published in this JOURNAL a very remarkable case of the foregoing disease. In this article he describes three additional cases,

expressing the belief that "we have here to do with a certain, well characterized clinical type of disease."

The whole course of the malady is chronic. The single papules and tumors require months and sometimes years for their development and for the various typical stages of their course.

The eruptive stadium of a single efflorescence can appear under various aspects. Very often the eruption appears suddenly, the whole involved skin being red and swollen and the seat of an itching sensation. In one or two cases a distinct papule appears upon the affected skin surface. Sometimes the papule will only be felt under the swollen skin, not appearing upon the surface. This stage of redness and turgescence may last a very long time. The color of the eruption is usually at this period vivid red or bluish or brown-red and a slight desquamation takes place. After this period the regressive stages follow. Gradually the tumor flattens, changing its red color into a yellow or brownish-yellow pigmentation; this may last long and is a very characteristic phase in the course of the malady. It cannot be taken for any other disease at this time, owing to the markedly yellow or brownish-yellow discoloration. In some cases this lesion is combined with the following telangiectatic condition, when, while the periphery of the tumor is still slightly infiltrated and yellow, the central portion is depressed and penetrated by enlarged capillaries. This telangiectasis seems to be a constant symptom, although it is not always present in the same degree. Lastly, the telangiectasis disappears leaving a slightly depressed, often hardly visible, white scar.

The tumors mostly occupy the face, but also the scalp, then the neck and the extensor surfaces of the upper extremities. Upon the lower extremities, both the extensor and flexor surfaces may be involved.

In cases where the whole course of the development of the tumor takes place in the subcutaneous tissue, only a slight redness of the skin will be seen.

The disease has a special tendency to localize itself around old scars. Neither softening nor ulceration of the tumor ever occurs. The glands in some cases may be swollen.

The pathology of the malady is rather to be regarded as an inflammatory hypertrophy of the connective tissue, than as a tumor-like neoplasm. The cause of the disease is still a mystery.

Arsenical treatment, uninterruptedly followed, will give good results, although the course is very prolonged.

Syphilitic Heredity.—By S. W. MACILWAINE, L.R.C.P., M.R.C.S. (*British Medical Journal*, June 15, 1901, page 1476).

In a communication MacIlwaine reports the case of a man, aged forty-seven, who incurred syphilitic infection some twenty-five years previously. Was not efficiently treated. The primary and secondary stages gave little trouble, and until five years ago he was in robust health. At that time he was found to be suffering from aortic regurgitation, and lately mitral regurgitation has been added, dropsy has increased and complete breakdown of the heart seems imminent.

He has two sons, ten and eight years old respectively, born at full term; the mother never showed signs of infection. Both children suffered from rickets in childhood, otherwise showed no evidence of disease.

The elder boy at the age of eight, immediately began to break down, on going to preparatory school. Suffered from chilblains, lost flesh and color, became rather unstable and irresponsible mentally, and soon suffered from diurnal incontinence

of urine and later, of feces also. He was unable to bear the conditions that suited other boys of the same age.

The younger boy, at the age of six, had a very violent epileptic attack, ten days after a slight injury to his forehead as a result of a fall on a gravel path. The attack was relieved only by the administration of chloroform. For two years thereafter epileptiform attacks came on, of varying intensity and intervals, associated with marked mental and physical deterioration.

Accepting the opinion of some that both the cardiac condition of the father and the pathological condition of the sons are alike traceable to syphilis, the author asks, "what is the exact relation of the diseased condition of the sons to the infective disease of the father." He believes that the cause of the disorders from which the sons suffer is not hereditary syphilis, but syphilitic heredity. The distinction between hereditary syphilis and syphilitic heredity is of great importance, as regard prognosis and treatment, and also as bearing on the question of the transmission of syphilis to succeeding generations.

A. L. W.

The Recognition and Etiology of Hospital Gangrene.—(Neumann's Clinic).—

RUDOLF MOLLENHAUER (*Arch. f. Derm. and Syph.*, 55, 1901, p. 66).

In spite of the prevalence of antiseptis, hospital gangrene still occurs in sporadic cases. Most often it is met with in the genital and anal regions. The so-called "diphtheritic" and "phagadenic" sores, which are wrongly called "gangrenous" are to be regarded as ulcers of this character, and represent the "pulpous" and "ulcerous" form. Whether the gangrene appears in the form of these two varieties depends upon the localization, and it is based upon anatomical conditions of the affected tissues.

Histologically the disease is characterized by an inflammatory process which leads to an early coagulation necrosis.

In all probability the disease is produced by an anaerobic bacillus. Although an unquestionable pure culture of that bacillus was not obtained, it is nevertheless always demonstrable in large numbers in the sections of tissue taken from the borders where the disease is spreading. The bacillus is long, straight, only occasionally slightly curved, $\frac{3}{4}$ mm. long and 0.3 to 0.4 mm. wide. The bacillus is mostly single, occasionally it is met with in twos arranged longitudinally. The ends are roundish. It is stained by Gram. The infectiousness of hospital gangrene is not so high as to require isolation. Inoculation upon human beings and animals succeeds only under special precautions.

Iodermia Tuberosum Fungoides.—O. ROSENTHAL (*Archiv f. Derm. and Syph.*, 57, 1901, 3).

A girl of twenty-nine was affected with a tumor-like eruption, occupying mostly the left side of the face, after a prolonged administration of K. I.

From histological examinations of excised tissue, the writer concludes that we have here chiefly to do with a considerable inflammatory change of the blood vessels, namely, with an endo- and probably peri-phlebitis and arteritis. The sebaceous glands are only affected indirectly. The pigmentation associated with the eruption is due to blood diapedesis. Regarding the fungoid growth of the eruption the writer is inclined to regard secondary infection with cocci as the cause.

Occupation Dermatitis in Skin-Dyers.—(*Annal. Derm. and Syph.*, 1901, April).

L. Bracy and Ch. Audry described under the name of "pigeonneau" ulcerations occurring upon the fingers of skin-dyers as consequences of their work.

After a review of the literature of the disease they describe three cases, which were under their observation from the beginning of their development. The changes upon the skin are consequences of the corroding substances used by the workers for dyeing purposes. Insignificant abrasions, fissures or slight desquamations upon fingers resulting from constant wetting of the fingers in solutions used in dyeing, turn into ulcerations of special typical aspect. They are either of an elongate form, running in the axis of the fingers, or present round, crateriform, deep ulcerations, sometimes reaching the periosteum. The edges are infiltrated, surrounding tissues inflamed and accompanied by itching and burning. The edges are sharply cut and a dark point is often visible in the bottom of the ulceration, giving it the appearance of a bird's eye; hence the name of "rossignol" given to it by the French workmen.

Usually the ulcerations are located upon the dorsal aspect of the metacarpophalangeal joint of the left thumb, but they are seen upon other phalanges and upon other fingers. Outside of this typical appearance the ulcerations do not present any other characteristic signs which may be used for differential diagnosis.

Left untreated and in favorable surroundings for development the sores may spread to the ungual phalanges, changing the form and appearance of the nails.

The best treatment is not to expose the hands to the detrimental action of the dye. Sometimes the disease will not affect the workmen for a long period; and then suddenly with the introduction of a new basic dye the disease will appear. Workmen suffering from latent syphilis are more liable to be victims.

A Clinical and Anatomic-Pathological Contribution to the Study of Pityriasis Rubra Hebræ.—W. KOPYTOWSKI and WIELOWIEYSKI. (*Arch. f. Dermat. and Syph.*, Vol. 57, 1901, p. 33; *Gazeta Lekarska*, Vol. 21, 1901, p. 915; *Journal des Mal. Cutan. et Syph.*, Vol. 13, 1901, p. 533).

This article is published simultaneously in the three foregoing medical journals, presenting in each one of them the subject from the standpoint of the readers of each, giving in the special journals the more interesting special points of the disease, in a more elaborate, minute and detailed manner, and paying more attention to points interesting to the general practitioner in the other.

The study is based upon a history of a patient whom the writers had an opportunity to observe for a long period, and who finally succumbed to the disease. The disease lasted two years and during that period was variously diagnosed as chronic eczema, universal eczema, scabies, and accordingly treated. For the period of his being under the writer's observation Asiatic pills, carbolic acid, ol. gynocardia, iodothyroidin have been tried with no success.

The writers in studying this case, tried to contribute some data on the question raised by Jadassohn, whether there is some connection between tuberculosis and pityriasis rubra. Jadassohn found giant cells and a few tubercle bacilli in the lymph glands. In order to prove or disprove Jadassohn's statement histological and bacteriological examination and inoculation into animals were undertaken with the following results.

For histological examination three pieces of the skin from various localities were removed during the patient's life, hardened in three different liquids, and serial sections examined. They were fortunate enough to be in a position to examine the various stages of the disease; the primary stage of papule formation;

the middle stage; the confluence of the papules and formation of diffuse inflammatory patches; and the last stage, the degeneration (*Entartung*) of the skin.

The most important feature in the histological findings was the presence of giant cells in the cutis, nearly always in the center of the inflammatory focus, single or sometimes in groups. Outside of giant cells epithelioid cells in clusters of three, four, five could be seen. Many transitory groups of cells were seen, allowing the authors to draw the conclusion that the giant cells developed from the epithelial cells. (?Ed.) No tubercle bacilli were found in the sections, which contained the giant cells.

Numbers of cocci were found in the cutis, especially the lower layers of the cutis. The cocci were not decolorized either by Gram or Weigert methods. In order to determine the rôle of the cocci pure cultures were obtained from the parenchyma of the living skin, showing diplococci, sometimes tetrads, not decolorized either by Gram or Weigert. Animal inoculations of pure cultures were not followed by any unfavorable results.

In order to corroborate Jadassohn's observation (tubercle bacilli in lymph glands of patient dead of pityriasis rubra) animal—guinea-pig—inoculations were undertaken. Pieces of skin taken from the patient during life were inoculated into the animals, and no tuberculosis developed in any of them.

The post-mortem examination of the patient revealed a croupous pneumonia, mixed, mostly parenchymatous nephritis, chronic fibrous and in some portions verrucous endocarditis and edema of the meninges. In portions of the skin taken after death parasites—cocci—were found. The writers are inclined to ascribe to the presence of the parasites in the skin during life and after death, an important rôle in the causation of the disease.

Coloring Matter Produced by *Pediculus Pubis*.—MORITZ OPPENHEIM. (*Arch. für Derm. and Syph.*, 57, 1901. 235).

Since the experiments of Deiguet and Mallet the maculæ ceruleæ, formed upon the human body in the presence of pediculus pubis, have been regarded as the result of a toxic erythema produced by the secretion of the salivary glands of the pediculus, which enters the skin during the bite. Although the maculæ never exhibit any redness or edema, although the steel-greyish color does not undergo the chromatic changes of blood extravasation, the foregoing view was nevertheless accepted. Oppenheimer examining the pediculus found that in its body there exists a green coloring substance like the coloring matter of the blue spots.

From chemical examinations he concludes that there is a certain similarity, although not an identity of the coloring matter with biliverdin and explains the formation of the coloring matter as follows:

The cells of the liver produce the pigment of bile within the human body. In the same manner the pediculus produces out of the hemoglobin of the human blood the foregoing green coloring substances, by means of a ferment present in its salivary glands. Of the salivary glands the pediculus has two pairs adjoining the stomach, both opening at the sides of the mandibles. During biting the ferment contained in the salivary glands is deposited under the skin and coming in contact with the human blood produces a green pigment substance, free from iron, which being finely scattered under the epidermis takes a steel-blue color. It does not undergo chromatic changes and retains its bluish tint till its absorption.

The pediculi of scalp and garments have no such power, and not all pediculi

pubis have the faculty of producing this coloring substance. According to the writer twenty per cent. of them do not exhibit traces of it.

Histology of an Induration Due to Injections of Calomel Administered

Three Years Ago.—CH. AUDRY. (*Jour. d. Mal. Cut. et Syph.*, 13, 1901, 373).

A man of forty suffering with syphilis received a series of calomel injections. Three years later he was admitted to the hospital with syphilitic leucoplasia of the tongue and pulmonary tuberculosis in the cavernous stage. In his buttocks there was an induration which was painful in humid weather. The post-mortem examination revealed in the place of induration a white round string, 0.015 cm. in diameter, covered with muscular fibers, exhibiting here and there a number of round cavities, giving to the cord the aspect of a sponge. In sections the cavities represented canaliculi of 0.005 to 0.01 in length, blind at their ends and not anastomosing. From microscopical examination the writer concludes that he had to do here with an old interstitial myositis ending in new connective tissue formation. There is no doubt that the inflammatory proliferative and degenerative process had its seat in the interfascicular connective tissue, and that the sarcolemma does not play any part in that process; it is destroyed like the rest of the muscular fibers. The cavities were probably determined by the initial injections. Not the slightest trace of any infectious process or of mercury was found.

GENITO-URINARY DISEASES.

Sterilization of Catheters.—*Med. Standard*, 1901, p. 273.

Through the efforts of Dr. M. Claudius of Copenhagen it seems that we finally have a sure and reliable method by which we can secure a perfect sterilization of catheters. The question at issue is treated briefly in *Hospitalstidende* No. 16-19, 1901. Boiling of catheters in ordinary water is a universally used method and has been employed since these instruments were invented and sterilization by boiling accepted by the profession. However, it is a fact, which is coming up for discussion by all bacteriologists, that boiling in plain water does not *per se* insure sterilization of catheters. Time and again have germs been cultivated from catheters which have been boiled for hours in plain water. Dr. Claudius has experimented with this problem and proved that silk catheters, which were rubbed vigorously with virulent cultures of streptococci, staphylococci, anthrax and other pathogenic germs and allowed to dry, would show cultures time and again, when boiled in plain water even for hours.

He then boiled these infected catheters in different solutions and tried to obtain cultures from them, at the same time observing how much damage was wrought to the catheters. He found that boiling in a concentrated salt solution not only did not spoil the instruments but did kill the pathogenic germs; furthermore, that a boiling of from five to ten minutes was all the time required. A question raised by many is this: Should the catheter at any time during the process of sterilization be in contact with the walls of the vessel in which it is boiled and would this result in a burning of the catheter? To this the doctor replies that if a thermometer is laid on the bottom of the vessel, even directly, over the point against which the flame is directed, the thermometer will only show an increase of temperature of $\frac{1}{2}^{\circ}$ to 1° . Even when the catheter or thermometer is enveloped in a cloth or otherwise prevented from touching the vessel

at any point, the result will be the same. It will thus be seen, that there is no difference whether the catheters are boiled in water or saturated salt solution, when the question of burning them against the sides of the "vessel" is at issue.

The point in this new method is this: By boiling in saturated salt solution, the catheters are exposed to a temperature of 110° C in a highly bactericidal medium. As said before, germs may retain their vitality and virulency by being boiled for hours in plain water; while they are *always killed* by being boiled in concentrated salt solution in the short space of from five to ten minutes. Boiling in the salt solution compared with boiling in plain water has its parallel in the autoclave at 120° C, compared with sterilization by steam at 100° C.

A Fatal Case of Hematoporphyrinuria.—By HENRY WALDO, M.D., M.R.C.P.
(*British Med'l. Journal*, June 15, 1901, page 1473).

A male patient, aged thirty-three, had taken various hypnotics, chiefly sulfonal, to induce sleep. Suffered from dyspepsia and giddiness.

Was taken with pain and tenderness over the stomach, attended with nausea, vomiting and constipation. Was slightly delirious at night and gradually passed into a condition resembling delirium tremens. The gastritis then passed off and in ten days he was able to take a fair amount of food per mouth. A few days after the onset of his illness, it was noticed that his urine resembled port wine in appearance, and smelt like chlorodyne, while another specimen smelt like celery.

When examined the urine contained no albumen and the guaiacum test gave no sign of blood. The microscope showed only a few crystals of uric acid. The spectroscope showed bands corresponding to those produced by hematoporphyrin.

The pulse rose from 80 at the beginning of his illness to 180 per minute. Patient became tremulous, restless and violent, and this condition was succeeded by general paresis in which the sphincters participated. Temperature varied from 99° to 104° . Four days before death, convulsions of an epileptic character occurred and continued to the end. No urine was passed for forty-eight hours and the bladder appeared to be empty. No headache appeared through all the illness, which consisted of ten days of symptoms of acute gastric irritation, and two weeks with cerebrospinal symptoms and progressive toxic paresis. No post-mortem could be obtained.

In these cases the symptoms are said to depend not so much on the action of the sulfonal itself as on chemical changes almost certainly alimentary in the first place, and probably hepatic, of which the drug has been the exciting cause.

A. L. W.

On Nephrorrhaphy with Flap Fixation.—By A. STURMDORF, M.D. (*Medical Record*, June 12, 1901, page 998).

STURMDORF describes a plan of procedure which he has devised, by which the loose kidney is fastened to the parietes. Two flaps are formed with blunt-pointed scissors by the slitting the capsule laterally at each end of a longitudinal incision.

Longitudinal slits, corresponding in location and length to the position and width of the fibrous capsular flaps, are next made through the adjacent muscular tissue, and the flaps drawn through these slits secured in place by a running suture of fine chromicized catgut. The final suture includes skin, fat and fascia; primary union follows, the sutures being removed on the eighth day.

The permanence of the result is guaranteed in proportion to the integrity of the capsular flap; for by this method are obtained not only all the advantages of

cicatricial adhesion, but in addition, the effectual retention secured by what might be called an artificial suspensory ligament. A. L. W.

The Bacteriology of Cystitis, Pyelitis and Pyelonephritis in Women, with a Consideration of the Accessory Etiological Factors in These Conditions, and of the Various Chemical and Microscopical Questions Involved. —By THOMAS R. BROWN, M.D. (*Johns Hopkins Hospital Reports*, Vol. X., Nos. 1 and 2, 1901.

In a very lengthy and exhaustive article, the author discusses this subject in great detail. One hundred cases were carefully studied, the cases being distributed as follows: Acute cystitis, 26; chronic cystitis (alone, 24; associated with pyelitis and pyelonephritis, 7), 31; tuberculous cystitis (alone, 2; associated with pyelitis and pyelonephritis, 4), 6; cases with symptoms suggestive of cystitis, but with no infection (due to urinary hyperacidity, 9; due to other causes, 8), 17; acute pyelonephritis and pyelitis, 2; chronic pyelonephritis and pyelitis (alone, 4; associated with cystitis, 8), 12; tuberculous pyelitis and pyelonephrosis (alone, 2; associated with cystitis, 4), 6.

Many of the cases were post-operative and could be carefully studied before, during and after the infection. In all the cases of renal infection the urine was obtained directly from the kidney by catheterization of the ureters, and a careful cystoscopic examination was made in all the chronic cases and most of the acute ones, so that no possible mistake could arise in the diagnosis of the condition. The conclusions arrived at are as follows:

1. The direct cause of the infection of the urinary tract in women is the invasion and multiplication of some form of micro-organism. 2. The most common cause of these infections is the *B. coli communis*, which a consideration of the cases of acute cystitis definitely proves can and does in a large number of cases set up a true infection without the aid of any other micro-organism.

3. Marked variations are seen in the virulence of this micro-organism and in its pyogenic properties.

4. Other micro-organisms frequently found are the tubercle bacilli, various staphylococci and the *B. proteus vulgaris*; while numerous varieties of micro-organisms have been less frequently and occasionally met with, as the *B. pyocyaneus* and typhoid bacillus.

5. The proportion of cases of infection due to the *B. coli communis* is greater in women than in men, probably due to the close proximity of the female urethra to the anus.

6. Besides the entrance of the micro-organisms, other factors are in most cases essential to the development of a cystitis; the chief of these factors are anemia, malnutrition, trauma of and pressure upon the bladder, congestion of the bladder and retention of urine.

7. In cystitis the chief mode of infection is by the urethra, though one must also consider as possibilities a descending ureteral infection from an infected kidney, pyogenic metastasis by means of the blood and lymph currents, and direct transmission of the micro-organisms from the intestinal tract or from some adjacent focus of infection.

8. In pyelitis and pyelonephritis the usual modes of infection are along the ureter from an infected bladder and by means of the blood and lymph currents; in the cases studied these modes of infection were found about equally represented.

9. In the great majority of cases of cystitis, both acute and chronic, and in the majority of cases of pyelitis and pyelonephritis, the urine is acid.

10. In the cases in which the urine is ammoniacal, the infection can be produced without the aid of any of the accessory etiological factors mentioned above, the irritation of the ammoniacal urine apparently being sufficient to render the bladder susceptible to infection.

11. In the case of infections of the kidney due to a urea-decomposing micro-organism, a stone is very likely to be present if the case is at all chronic.

12. Certain conditions exist which present most of the symptoms of cystitis but no infection; the most difficult of which to diagnose is probably urinary hyperacidity of neuropathic origin, the successful treatment of which depends upon the successful recognition both of its urinary features and its general basis.

13. Although the diagnosis of renal infections can be made with absolute certainty only by ureteral catheterization, a probable differentiation between renal and vesical infection can be made by a careful study of the urine alone.

14. Tuberculous infections of the urinary tract frequently occur with no other demonstrable tuberculous lesions elsewhere in the body. Probably a tuberculous gland would be demonstrable post-mortem in most of these cases.

15. The colon bacillus seems to be the most common cause of pyelitis, while the *B. proteus vulgaris* and members of the staphylococcus group are also found less frequently.

16. And finally, to be able to thoroughly understand cases of cystitis, pyelitis and pyelonephritis, to make the proper diagnosis, to inaugurate and carry out a rational line of treatment and to give a correct prognosis, a careful chemical and bacteriological examination of the urine is absolutely essential.

A. L. W.

Renal Tension and Its Treatment by Surgical Means.—By REGINALD HARRISON, F.R.C.S. (read in the Surgical Section at the Annual Meeting of the British Medical Association, 1901).

Harrison advocates incision of the capsule of the kidney in cases of renal tension. He terms the operation "capsular nephrotomy," the term being intended to limit the extent of the proceeding. A number of cases are reported in which an incision into the capsule of the organ, one to two inches in length, performed on the convex border, relieved the tension and the nephritis in cases in which medical treatment had failed.

The kidney capsule is very intolerant of sudden increase of intrarenal tension and experience teaches that in certain conditions of congestion the capsule is so tightly stretched and its substance exposed to so much pressure as quite to explain any interference with its functions. The results of operation also tend to show the importance of increased tension, for sometimes after mere incision the quantity of urine excretion is doubled in twenty-four hours.

Of four cases related, one was scarlatinal nephritis, the second was nephritis from the exposure to cold and damp, the third, subacute nephritis probably following upon influenza, the fourth, nephritis complicated with an injury. All four cases were characterized, among other features, by the presence of albumen in the urine, which the author attributes to inflammation or its immediate effects. In all of these cases the cortical incision relieved the tension in quick order. Direct surgical intervention for the relief of tension is indicated also in that class of cases in which the congestion and inflammation of the kidneys are caused by irritants derived from various infectious diseases, such as scarlet fever,

diphtheria, measles, and the like, from alcohol and food intoxicants, and from the excessive use of such drugs as turpentine and cantharides.

The author calls attention to the fact that the relief of renal tension will often prevent the tension on the heart, and the circulatory apparatus generally, in their efforts at equalizing the circulation of the blood. Hypertrophy of the heart wall and increased vascular tension follow the increased efforts of the heart.

Indications for relieving the tension surgically in cases of nephritis, however arising, are: (1) Progressive signs of kidney deterioration, as shown by the persistence or increase of albumen when it should be diminishing or disappearing from the urine, as in the natural course of inflammatory disorders ending in resolution; (2) suppression of urine, or approach to this stage; (3) where a marked disturbance of the heart and circulatory apparatus arises in the course of inflammatory renal disorders.

There is but a slight risk in the operation and it should be undertaken where there is a fair prospect of saving a life, or avoiding the invalid life which is inseparable from a chronic albuminuria arising out of a nephritis. There is seldom much bleeding or even necessity of tying a vessel.

As to which organ should be selected for operation, unless there is some indication, as pain in one of the kidneys, it matters little which of the two is selected. In double nephritis the relief of tension in one kidney aids the other.

A. L. W.

Double Ureter of the Right Kidney.—By CHARLES M. SCUDDER, M.D. (*The American Journal of the Medical Sciences*, July, 1901, page 46).

Scudder reports a case, the ninth recorded instance, of the blind ending of a supernumerary ureter. This case was associated with acute abdominal symptoms of a marked character.

The patient was a child twenty months old. It suddenly became ill, with fever, and symptoms that resembled intestinal obstruction. Exploratory laparotomy revealed a normal intestinal tract, but there was found a retroperitoneal tumor, extending from the kidney on the right, down in curves, across the lumbar region and behind the bladder. The left kidney was normal. Owing to the child's condition, the abdominal incision was closed, and the child died the next morning.

Upon autopsy, the sausage-like mass was found to represent an enormously dilated ureter of the right kidney, filled with a thin, yellowish fluid containing leucocytes and bacteria, and ending blindly as a closed sac about the diameter of the thumb, in the neighborhood of the orifice of the urethra, the internal meatus. It ran transversely across the axis of the body four or five times, the loops being bound together with connective tissue. It was probably 45 cm. long and 11 cm. in diameter at its widest part. The entire kidney was large, measuring 9 cm. in length.

The literature is mentioned.

A. L. W.

Gonorrheal Myositis.—By MARTIN W. WARE, M.D. (*The American Journal of the Medical Sciences*, July, 1901, page 40).

Ware reports a case of gonorrheal myositis in a man aged 35 years. Four weeks after the contraction of gonorrheal urethritis he was attacked with pain in the left knee-joint, attended with a chill and fever. Three weeks later he complained of pain in a shoulder. The region showed fulness, no redness, and active abduction was impossible. By palpation an exquisitely tender area of

induration was elicited in the group of muscles which constitute the posterior axillary fold. It was about the size of a walnut. The daily elevation of temperature was about 100° F. Under expectant treatment (iodin locally) the mass not only grew, but became more painful. It was incised under local anesthesia. The muscles were sodden, grayish in color, and friable in the deeper layers. There was no pus, though there was a free exudation of serum. A piece of the muscle was excised. Though relief from pain followed the incision, it took six weeks for the wound to close.

Gonococci were found in the urethral discharges. They were also found in the smears made from the serum found in the muscles, but they were exceedingly sparse. The cultures failed, though they showed the presence of no other organism.

The author explains the location of the gonococci in these muscles either as a metastasis or as an extension of the inflammation from adjoining joints or bones. The latter, he thinks, is more likely. The literature of the subject is thoroughly discussed, there having been but three cases previously recorded, based upon clinical observation solely.

Treatment is largely expectant. For the pain, dry heat, hot salt, sand-bags, as in joint disease, aided by local anodynes, guaiacol, gaultheria and menthol. Massage is recommended after the acuteness of the process has passed away. Incision is thought to accomplish depletion and relieve the tension, in very painful cases.

A. L. W.

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COLLOID DEGENERATION OF THE SKIN.

BY CHARLES J. WHITE, M.D.,

Assistant in Dermatology in Harvard University.

THE discovery of a new case of this extremely rare condition seems to the writer a sufficient cause to review the past literature upon the subject and to add to the meagre list of observations the results of his personal investigations.

In 1866, E. Wagner reported the first example of this affection under the title colloid milium. The patient was a woman, fifty-four years of age, whose occupation was not recorded. About six months before her appearance at the clinic the woman had had severe headaches, which had persisted for six or eight weeks. At the time of entrance she presented upon her forehead, across the bridge of her nose, and upon the cheeks above the molar prominences, many small tumors. The skin of the forehead was thickened and crossed by several furrows which retained the normal color of the skin. Between these depressions appeared many brownish yellow, glistening, small, thickly placed, but never coalescing, roundish elevations, which seemed to the eye like vesicles, but to the touch revealed themselves as firm masses. On deep pricking with the needle no fluid, save a drop of blood appeared, but on pressure between the fingers a pale yellow, glistening transparent substance exuded. On microscopical examination this expressed mass appeared as small cylindrical bundles which remained unaltered in the presence of acetic acid, alkalies, iodine and sulphuric acid, and which corresponded in other ways to the tests for colloid matter. Hence Wagner concluded that he had to do with a

colloid change which he placed in the sebaceous glands of the skin and called his unusual tumor colloid milium.

Thirteen years later Besnier recorded the second instance of this condition and with the aid of Balzer gave us a truer conception of the subject which has remained unaltered up to the present time.

In 1879, a forest warden appeared at the St. Louis Hospital. He was forty-six years of age and had apparently never noticed the peculiar condition of his skin. Upon the bridge of the nose, over the temporal and about the orbital regions of the face appeared brilliant yellowish, translucent elevations which stood out conspicuously from the brown weather-beaten skin. At first sight they resembled vesicles, but incision revealed only a droplet of blood and to the touch they proved firm and elastic. The lesions apparently were bounded by the finer lines of cleavage of the skin, and, therefore, appeared in many shapes and varied in size up to the dimension of a kernel of wheat. On curetting these tumors a slightly blood-tinged, gelatinous mass appeared which resembled colloid matter. These lesions differed from xanthomatous masses by their greater brilliancy, darker color and firmer consistency. In addition to the above conditions, Besnier noted similar appearances on the conjunctiva near the inner angle of each eye and on the septum nasi, and further elicited from his patient the fact that he had had severe, almost daily, occipital headaches.

Balzer found that the expressed gelatinous mass consisted of homogeneous bundles of connective tissue which became orange yellow on staining with picrocarminate of ammonia and remained unmodified by acetic acid. He further noted that these bundles were enclosed in an amorphous envelope consisting of normal connective tissue cells.

His examination of sections stained with picrocarminate of ammonia only confirmed his first investigations. He found the epidermis thinned in all its layers, the stratum corneum very fine, the stratum lucidum invisible, and the rete cells flattened and in some places vacuolated—in other words, marked signs of pressure—and where the colloid blocks beneath were largest there the epidermis showed the most marked alterations. In the corium he found the chief seat of the disturbance where the colloid masses had completely flattened out the papillæ and pushed aside the glandular elements of the skin. Immediately below the epidermis, around the glands, and by the side of the hair follicles, Balzer could always distinguish a thin strip of connective tissue which thus separated the colloid substance from the epithelial elements of the skin which were never involved in the colloid change. The colloid masses were colored a yellowish-orange, and where the process was more marked the fibers were swollen, less undulating and

finally became homogeneous masses. The few nerve trunks visible remained unaltered, but the vessel walls, on the contrary, shared markedly in the degenerative process. The external tunic appeared hyaline, brilliant, thickened and in places bosselated, while the intima was thickened, but not degenerated. These alterations were proved not to be amyloid. As these vascular changes were noted at some distance from the colloid blocks, Balzer concluded that the whole disease was due to primary involvement of the blood vessels.

From these anatomical data Besnier was able to locate the true

FIG. 1.

Section stained with hematoxylin-eosin. Corium practically reduced to a homogeneous mass devoid of usual elements. Lacunæ are artificial, due to shrinkage.

seat of the degeneration in the corium and to demonstrate the fact that the sebaceous glands played no part in the process. Therefore, colloid milium was a misnomer and Besnier rechristened the disease colloid degeneration of the corium—the title which dermatologists employ to-day.

In 1885, Feulard discovered the third example of the disease in a gardener aged forty years, who had always been exposed to the open air. The disease had first appeared seven years before as two small yellow elevations on the left cheek. In eighteen months the whole

right cheek and the nose were covered with similar lesions and four years later the forehead and the left ear were invaded. At the time of his visit, Feulard noted small, lemon-yellow, transparent elevations varying in size up to the dimensions of a millet seed. These yielded on excision and firm pressure a jelly-like substance tinged with blood. In addition to the cutaneous lesions Feulard found yellow lines running transversely across the cornea.

Balzer studied this series of tumors also and found conditions exactly similar to those noted in Besnier's case. In addition he treated some sections with eosin and 40 per cent. hydrate of potash, and claimed that he could demonstrate the integrity of the elastic fibers around the colloid blocks. He again asserted the prominent etiological rôle of the blood vessels.

One year later, in 1886, Liveing published a communication upon this same subject and claimed, without microscopical examinations, that he had met with three new examples of colloid degeneration of the skin. The tumors resembled xanthoma, but were bright and translucent.

His first case was a young woman. His second a man, whose tumors appeared on the face and neck, and at the end of a year the disease had run its course and the lesions had disappeared. His third example was in a girl of sixteen, on whose face, neck and arms he observed similar elevations, many of which grew soft and depressed in the center, became later inflamed and covered by a crust and finally disappeared, leaving behind them slight depressions in the skin. The better preserved lesions appeared as small, slightly elevated, yellowish, flattened, translucent projections of semi-solid nature, surrounded in many cases by vessels.

On account of the age of the patients, the seat of the tumors and their subsequent life history, it does not seem proper to the writer to accept these cases, especially without histological proof, as genuine examples of colloid degeneration of the skin.

In 1890 Philippon wrote an article in which he put forth an unusual claim. A syphilitic woman of twenty-five consulted him about her disease and during his examination Philippon discovered upon her lower eyelids two hemispherical, millet-seed-sized nodules, smooth on the surface, tense to the touch and imbedded in the cutis propria. These nodules were of the same hue as the surrounding normal skin, were more transparent than the ordinary milium, and had existed as long as the patient could remember.

In a second patient, aged thirty-nine, Philippon observed a few similar lesions upon the eyelids and several others upon the chest, one

of which he examined microscopically and found to be an example of hydradenoma of Darier (syringo cyst adenoma, Török), benign cystic epithelioma (Besnier, etc.), with subsequent colloid changes. As the result of this examination Philippson inferred that after all both Wagner and Besnier were in error and that the disease under discussion

FIG. 2

Weigert's elastic tissue stain. Darker regions are degenerated elastic tissue (elacin): The central, lighter portion is colloid mass.

was not colloid milium or colloid degeneration of the corium, but was indeed hydradenoma, followed by colloid changes.

This sweeping inference seems quite untenable to me on clinical and on histological grounds.

At the second international dermatological congress in Vienna, in 1892, Perrin described the fourth undoubted instance of colloid degeneration of the corium. The patient was a woman rag-picker of fifty-four years, who had spent her mornings in collecting rags and

her afternoons in sorting them, always sitting in full sunlight near the sea.

Scattered over her forehead, bridge of nose, temples, upper part of cheeks and backs of hands appeared yellowish, translucent, firm, roundish elevations, pin-head in size, which often existed in great numbers, but never coalesced. These stood forth conspicuously from the brown, weather-beaten, thickened skin. In addition Perrin noted on the conjunctiva, at the inner angle of each eye, yellow, lobulated, movable masses.

The histological investigations of Reboul were most complete and detailed. Reboul found that all the layers of the epidermis were thinned. The stratum corneum consisted of a very fine layer, the cells of the stratum granulosum were vesicular in places and much reduced in number, and the stratum mucosum was practically absent in certain areas. The corium consisted of blocks of colloid matter of various shapes and sizes, stained yellow orange by picro-carmin and surrounded by pink staining connective tissue. The larger areas were bounded by excretory sweat canals and by hair follicles, but he always noted the delicate intervening band of pink-staining connective tissue which separated the degenerated homogeneous connective tissue bundles from the epidermal structures which completely enclosed them. Where the transition from normal to degenerated tissue was most sharply marked, embryonal and connective tissue cells were abundant and normal.

A new feature observed on the outskirts of these sections was a granulo-fatty change which Reboul considered might be the possible forerunner of the later process. In the hypoderm the connective tissue was condensed into a thick layer where a few vessels appeared with degenerated middle and outer coats. The glands were normal, but their surrounding connective tissue envelope was slightly affected by colloid changes. In closing his remarks, Reboul emphatically states that he cannot agree with Philippson's conclusions.

The last publication upon this subject which has come to the writer's notice was by G. H. Fox, who observed in a coachman, aged thirty-two, a disease which Fox said resembled at first glance acne or syphilis. In the labio-nasal fold, on the chin between the eyebrows and on the upper border of the ear appeared nodules varying in size from a pin's head to a split pea. The lesions were firm, flat, dull red to yellow red in color with some umbilication. The larger ones were softer and yielded blood and pus on incision and on pressure produced a crackling sound, as though one were in the presence of a multilocular cyst. Other tumors gave out a gelatinous material with considerable hemorrhage.

Elliot reported on microscopical examination that the tissue suggested very strongly tuberculosis. Some of the tumors were curetted and others left to themselves. The latter all disappeared during the following summer, leaving a pock-marked look to the skin.

This case also seems to the writer, from its clinical and histological characters and its later changes, not to belong to true colloid degeneration. Thus from the whole of the literature we are enabled to report only four unquestionable examples of this most unusual condition.

Before adding what we consider to be the fifth undoubted case yet recorded, let us make a few quotations from Unna, who was enabled to examine with his specific stains some of the sections from Perrin's case. He found that the fainter stains of elastic tissue noted by Perrin (Reboul) were due to the presence of elacin, and that the colloid blocks were surrounded, as Balzer had stated, by a shell of elastic tissue which had broken down into drops, fragments and small granules, and that even around the smaller colloid blocks, elastic tissue still persisted. He then states that the collagen (normal fibrous tissue) progressively breaks up and combines with elastin (normal elastic tissue) to form collastin (staining in orcein-water, blue, brown-red with orcein, while the normal collagen absorbs the blue tint). Later a further combination of collagen with elacin (basophilic elastic tissue) ensues and produces collacin (which absorbs basophilic colors and appears as small granules within degenerated collagenous bundles). Unna remarks that he has never before noted collacin in such abundance. Finally, by the further disintegration of the collagen the connective becomes the homogeneous mass known as colloid.

The elastic tissue also undergoes changes and becomes elacin, but there the process stops and this tissue never reaches the colloid state.

Our example of colloid degeneration occurred in an Irishman, aged fifty-two, who had never lost a day's work on account of illness, but had suffered for the last ten years from recurrent attacks of hay-fever. From boyhood up to the age of thirty-two the patient had been a gardener in Ireland. He then came to America and pursued the occupation of a hod-carrier for ten years, and finally, ten years ago, received the position of gate tender on one of our steam railways. Thus we have a long life during which the man had been constantly exposed to the effects of the hot sun of summer and the cold winds of winter.

Four years ago the first lesions were noticed upon the back of one hand and during the following two years many similar nodules developed on the exposed parts of the body and have persisted until the present time. The man complains of no subjective symptoms and came

to the Massachusetts General Hospital solely on account of the abnormal condition of his skin.

The individual lesion is a smooth, flat papule from $\frac{1}{8}$ to $\frac{1}{4}$ of an inch in diameter, irregularly rounded or polygonal in outlines, exceedingly translucent and yellowish brown in color, and soft, elastic, and almost gelatinous to the touch. The papules project perhaps $\frac{1}{8}$ of an inch above the surface and present a very unusual appearance. They are situated on the backs of the hands, radiate in an acute angle from the outer canthus of each eye, occur in lesser numbers upon the cheek and entirely cover the whole surface of the tragus, antitragus and pinna of each ear, giving the latter a notched look when seen in profile.

On the alæ of the nose there are groups of large black comedones and here and there are yellow concretions, polygonal in shape, filling up the mouths of the follicles. The nose, as a whole, is rather increased in size.

A nodule was excised from the back of the hand, hardened in alcohol and imbedded in celloidin for examination.

Epidermis.—The stratum corneum is distinctly hyperplastic—markedly so over the follicular openings—and the many anuclear cells are thrown up into well-separated lamellæ. The stratum lucidum is also more pronounced than usual. The stratum granulosum consists, for the most part, of three to four layers of cells, but over the central portion of the underlying tumor mass it recedes to one or two layers and the individual cells become especially less granular and appear flattened and elongated. The stratum spinosum is also diminished in depth—the germinate layer being apparently quite wanting, and in its place we find many flattened vacuolated cells, while above we note the disappearance of many nuclei. Mitoses and pigment are totally absent. Thus the epidermis presents the typical appearances resulting from pressure.

Corium.—Looking at the sections with a low power we see two masses of tissue quite uniform in structure, intersected in three places by hair follicles. In some of the sections one of the masses has fallen out, leaving only the follicular boundaries. The papillæ have entirely disappeared and in their place we find a narrow, dense zone which follows down by the side of the hair follicles on either side and unites below the tumor mass in a much thinner band. This consists, for the most part, of degenerated elastic tissue in the form of coarse, straight, irregularly swollen or broken fibers, which absorb the characteristic stain of elacin. Here and there we find a few areas of normal elastin which absorb the Weigert stain sharply and appear as small tortuous fibrillæ. This surrounding zone of elacin lies coincidently with the

only area of the corium in which we find any normal connective tissue and even here the collagen is reduced to a minimum.

Within this zone of elacin we find the tumor proper consisting of small or large irregularly shaped islands of tissue bounded at intervals by capillaries whose walls show thickened masses of elacin. (The large, dilated lacunæ which appear in the photographs are artificial and due to the contraction of the celloidin during the last year.) Within these enclosing capillary walls the true colloid material appears composed of a ground-work of fine or coarse granules which stain uniformly yellow with picric acid and a bluish green with polychrome, methyl blue and orange tannin. Scattered through this homogeneous mass one is surprised to note perfectly preserved connective tissue nuclei and on approaching the encapsulating vessels to find many surrounding leucocytes with a rare plasma cell.

In studying this degenerative process we have been disappointed in not finding any collacin or collastin which Unna found so abundant in his slides, but we feel that perhaps the reason may lie in the possibility that the degeneration had completely attained its end result and not that our technique was at fault. To test the value of specific tissue stains one should employ several methods, if possible, for the same tissue, and then compare the slides one with another. For this purpose we have used hematoxylin-eosin, which gives us a good collagen and elacin stain; Weigert's elastic stain, which colors elastin sharply and dark and elacin in a lesser degree; Unna's acid fuchsin-picric acid stain, which he considers so useful in detecting the presence of collacin and colloid matter, and, lastly, Unna's complicated method by acid orcein-polychrome methylene-blue-orange tannin, which stains elastin and collastin dark brown, elacin and collacin and nuclei blue, and collagen yellow.

VEGETATING DERMATITIS DEVELOPING DURING THE
COURSE OF INFANTILE ECZEMA.

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WE wish to report two cases of a rare skin condition, to be supplemented by a consideration of such other similar cases as have already been reported. Our record of the first case is imperfect, so far as the beginning of the trouble is concerned, but the mother of the child is thoroughly intelligent and what she says may be accepted. The photograph which we have taken represents the case when first seen—that of a patient who came to us in January, 1897, when he was about eight months old. The trouble began with seborrheal eczema, starting on the scalp when the child was only three weeks old and later spreading to the face. This process was active or quiescent at different times, like that of a typical eczema.

In December, 1896, the mother first noticed pustules on the scalp, which rapidly developed into quasi tumors. On January 30, 1897, when the case first came under our notice, lesions of the same character were found on the face and scalp. Most of them were nodular squamous masses, varying in size from a bean to a child's fist. The larger were made up of smaller ones which had coalesced and assumed an irregular contour. The lesions appeared rough and scaly and, on removal of the debris, a vegetating appearance was seen. Often in the border of the larger groups, as well as in their immediate vicinity, many small pustules appeared. These were also found scattered over the whole involved surface, and varied in size and stage of development. They were sometimes found in groups but were usually isolated. After removing the scales, oleate of mercury was twice applied daily. The lesions cleared up in three weeks and did not return. No scarring resulted, and their only remaining trace was a slight pigmentation.

The second case was first seen March 8, 1901, that of a child then six months old who was reported healthy at birth, nursed by her mother, and continued well until she was five weeks old when a seborrheal eczema was developed at the vertex of the scalp, which, in four months, spread over the entire scalp. When she was about four months old, and during an almost complete remission of the eczema, the lesions which were especially to interest us began to develop. At

first small and few in number, they attacked the eczematous area, some appearing in groups while others were diffused. Others soon appeared, the older ones increasing in size, some becoming, in a very short time, as large as a walnut.

FIG. 1.

On examination March 8th, the child then being six months old, the scalp still showed traces of the seborrheal eczema, but none was found on other portions of the body. On the scalp there were ten well-developed lesions, varying in size from a pea to a hickory nut. These were well raised above the surrounding surface, and were covered with crusts in which matted hair was embedded. On the forehead, near the median line, were two papillomatous lesions of filbert

size, with uneven surfaces, covered with crusts, the entire mass being firm to the touch. The lesions were well defined and the surrounding surface seemed healthy. On the right cheek, on a line with the nares, was a lesion surrounded by seven small discrete pustulo-papules, varying in size from a pinhead to a large pea. The small lesions contained very little pus at their apices, their bases were reddened and raised. On the left cheek was one large lesion the size of a fifty-cent piece and one inch deep, composed of coalescent lesions; at two points a

FIG. 3.

Papillomatous lesion showing hyperplasia of rete

small amount of pus could be pressed out, and the most gentle manipulation resulted in bleeding. On the left leg, over the anterior surface of the tibia in its lower third, was an incrusted lesion about the size of a silver dollar. During the lapse of two weeks, a number of minute isolated pustules appeared among those already formed. On the day following, in an effort to obtain bacteriological material, a crop of pustules appeared on the chest which showed upon examination, three days later, small isolated pustulo-papules extending over an area 3 inches wide by 5 inches long. There were about thirty

of these lesions, from a pinhead to a dime size, raised above the surface, each one of them surmounted by miliary pustules. Three of them appeared papillomatous and formed circular reddish plaques.

As to treatment, as already intimated regarding the first patient, in six weeks all evidences of the disease were removed. In the second case, the treatment was simple; crusts were removed with water pre-

FIG. 4.

Same section more highly magnified, showing well-defined prickles, with granular cell remains in the meshes.

viously softened with oil. Antiseptic ointments were applied, oleate of mercury was used on the head and sulphur upon the body. Both applications acted equally well. In eight weeks the condition had entirely disappeared, although the treatment was discontinued for two weeks in order to obtain material for bacteriological examination.

Bacteriological Examination.—Cover slip preparations from the miliary pustules showed plenty of staphylococcus epidermidis albus. All kinds of media were used and inoculations from the pustules, as

well as teased tissue, were made. The cultures, after twenty-four hours, showed white colonies which were almost a pure growth of diplococci, very small and were stained by Gram.

Further study, by the planting of micro-organisms on the various culture media, potato, gelatine, milk, bouillon, etc., showed almost a pure culture of the small organisms which arranged itself singly, in pairs and in small bunches. A few of the tubes contained a mixed culture. Several colonies corresponded to those found in the previous tubes. The other organism was *staphylococcus pyogenes albus*.

Histopathology.—Two tumors, representing different periods in growth, were removed for microscopical examination. These were placed in Zenker's fluid and alcohol and stained by various stains, including those for bacteria.

Horny layer.—The horny layer was entirely removed or became moderately thickened. The surface contained much débris, consisting of blood capsules, shreds of horny epithelium, and, in portions not detached, large nucleated epithelial cells.

Stratum lucidum.—This was not discovered in the diseased skin. There were no cells to be found distinct from the stratum granulosum although eleidin granules could be noted by means of the oil immersion.

Granular layer.—The granular layer was deepened and, in the more recent growth, increased by two or three layers; it was, however, much thinner in the older lesions. There were a number of leucocytes seen in this as well as in the horny layer.

Rete.—This layer was uniformly and excessively thickened, causing projections which dipped deeply into the cutis. Evidence of edema appeared. The superficial cells showed vesicular nuclei, although occasionally shriveled nuclei could be seen. All the cells, even the superficial ones, possessed distinct prickles. Leucocytes were found between the cells of the superficial layer and in certain places had resulted in a formation suggestive of pustules.

Cutis.—The blood and lymph vessels were specially dilated, particularly under the elongated papillæ. There was a decided infiltration of leucocytes and a few plasma cells in the papillary layer of the corium. In the deeper layer they were limited to close relation with the blood-vessels. The leucocytes were almost invariably lymphocytes. Polymorphonuclear leucocytes were present, but rarely proliferating connective-tissue cells. In the older tissue the changes were essentially the same, although many of the cells showed regressive alterations, the leucocytes, in many instances having aggregated and formed pustules. No micro-organisms were discovered.

Dr. Hartzell kindly loaned us a microscopical slide of the case, a synopsis of which forms a portion of this article. His and our cases all exhibit a benign hypertrophy; his case, however, being older, was, of course, more marked, and included well-formed miliary abscesses. In our case there were several collections of leucocytes possibly the beginning of similar ones.

With these two cases before us we may look at their common characteristics. We find in each the following lesions; first, the superficial miliary pustules from which a droplet of pus can be squeezed. These are surrounded with reddened bases varying in size. As the base increases, the pustules apparently disappear. Later, the lesion is covered with scales and crusts. At the same time the base becomes elevated above the surface of the surrounding skin and assumes a more or less circular papillomatous vegetating appearance, which is seen on removal of the crusts. These vegetations arise either from the base of a single pustule or by the coalescence of several lesions. They show a peripheral extension and form a group of pustules; the more recent ones, upon removing their crusts, appear intact at the border of the growth. The largest reach an elevation of one inch. The etiological factors are not striking. The first question is whether the dermatitis vegetans is strictly and entirely the result of eczema. This seems hardly possible, because such a complication is rarely manifested. May it not be due to a circumscribed or a secondary infection? Careful inquiry was made regarding other members of the family, but no such cutaneous malady was found to exist. We know that non-specific lesions of the skin may accompany other forms of secondary infection. The mode of development and the rapidity with which the lesions responded to antiseptic treatment suggest the possibility of some micro-organism as the inceptive influence in this affection. Further, has this condition arisen as a result of medicine taken by either mother or child? Careful inquiry led to a negative conclusion. In differentiating these cases from those more recently specified in medical literature, one would naturally think of Blastomycetic Dermatitis, especially when the microscopical appearance is taken into consideration. The benign hypertrophy and the small accumulations of leucocytes suggestive of miliary abscess formations are points in common with that disease. No blastomycetes were found in the cutis by Dr. Gilchrist, who kindly looked over the specimens and reported a negative examination. Syphilis, Pemphigus Vegetans and Dermatitis Herpetiformis were eliminated after due investigation and consideration.

Perrin, in *Annales de Dermatologie et de Syphiligraphie*, 1900,

No. 10, reports three cases of nurslings which seems to correspond with ours. Seborrheal eczema of the scalp in one case had spread to forehead and cheeks. The lesions involved none of the hairy portions of the body but were found on forehead, cheeks and chin, upon the wrists, chiefly on their dorsal surfaces, and upon the posterior and external surfaces of the thigh and legs. The primary efflorescence, as observed in these cases where new lesions developed during the course of the disease, was a pustulopapule. The pustule was milia-ry and was situated upon a small papule varying in size from a millet-seed to a lentil. The union of several of these pustulopapules formed a secondary lesion which is also characteristic, viz.: the papillomatous vegetation which is covered by a crust. The surface of one of these vegetating plaques was dark red. It was clearly limited, more or less circular in form, elevated above the surface and not painful to palpation. In older plaques, that is, those of over fifteen days, the center was covered by a crust, while at the periphery recent pustulopapules were present. The vegetations varied in size from a half dime to a twenty-five cent piece (20 ctms. to 2 franc) and some had a polycyclic contour. They were quite superficial and elevated one-third to one-fifth of an inch above the surrounding integument which was wholly unaffected, so that the crusts appeared to be "stuck on" to the skin, as in *impetigo contagiosa*. Under treatment, the vegetations disappeared leaving *granulæ maculæ*, which, in turn, were obliterated, leaving pigmented areas, like those following *impetigo*. These finally faded out and left no trace whatever. In no case did scars result. The durations of individual lesions under treatment with mild antiseptics was from two to three weeks. Perrin's observations were made upon infants $2\frac{1}{2}$, $4\frac{1}{2}$ and 7 months old. All these were apparently healthy at birth—the mothers were the same. The babes were nursed by the mothers, were fat and seemed vigorous, had no gastroenteritis and were in perfect health when examined, except for the seborrheal eczema which was present in each case, as were the peculiar lesions which concern the present inquiry. No medicines had been taken by either mothers or infants which might account for the lesions, particularly no bromide. The theory of syphilis was also excluded.

A comparison of these cases with our own shows many points of resemblance. All the cases occurred in nurslings afflicted with seborrheal eczema but otherwise in good health. The lesions seemed similar in the papulopustules of the primary efflorescence, in the secondary changes, in size, in appearing in crops, in development, in disappearance, in duration, and in the readiness with which they yielded to

treatment. There was no recurrence in any of the cases. The real differences seem trifling. In none of Perrin's cases did the lesions appear upon the scalp, which was the original seat of the seborrhea, while in both of our cases the scalp was involved. Further, we found that the vegetations would bleed readily when handled. Perrin makes no note of this. The points of resemblance are so numerous and the differences so slight that we feel justified in considering our cases as manifestations of the same condition existing in those reported by him.

A short summary of anomalous cases appearing in adults, but presenting features similar to those characterizing the cases which we have reported, will be of interest. In 1894, Hallopeau, in *Annals de Dermatologie et de Syphiligraphie*, reported a case of seborrheal eczema of eighteen months' duration occurring in a patient fifty years old. The face, thorax, axillæ and inguinal regions were involved in the seborrheal implication. A large vegetating patch similar to those already described was found upon the scalp. This yielded to mild antiseptic compresses. Although occurring in an adult, the case resembles those previously mentioned, in the manner of developing, in the presence of seborrhea, in the nature of the vegetating lesions on the scalp and in response to treatment.

Another case was reported by Hartzell in the *JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES*, October, 1901, in which the clinical appearances were strikingly like those in Hallopeau's case. It is the case of a patient 57 years old, in which lesions began with pea-sized pustules on the buttocks and scrotum, later becoming confluent and crusted and then extending to the groins and thighs. Vegetations slowly appeared, increasing in size for some months, then remaining stationary. Only occasional miliary pustules were formed, and these were in the inguinal plaques. There were no bullæ and no involvement of the mucous membranes. To quote from Dr. Hartzell's description, the plaques were violaceous in color, elevated several millimeters above the surrounding healthy skin, sharply defined in outline, and covered with a thin, whitish scale, with a few bright red oozing points scattered here and there over the surface. There was also chronic eczema of the thighs and legs. The history obtained from the patient was not clear, owing to his mental dulness. After having been under observation only three or four weeks he died from pneumonia. No appreciable changes in the lesions occurred while he was in the hospital. The vegetating lesions and the miliary pustules in this case seem like those already considered, save that they did not show so rapid a tendency to resolution.

At different times, Hallopeau has reported five cases which he collected into one report, in 1898, under the title of *Pyodermite Vegetante* and published the article in *Archiv für Dermatologie und Syphilis*, but he does not mention in this series the case formerly reported by him under the name of *Vegetating Eczema*, which possesses striking features of resemblance to the class of cases he reported as *Pyodermite Vegetante*. The essential lesions as described by this author consist of miliary pustules, which soon become surrounded by a reddened area or base. These pustules appear in groups, soon coalesce, burst open and discharge the pus. They then become covered with crusts, which, on removal, show reddened surfaces of a papillomatous vegetating appearance, more or less elevated above the surface of the surrounding skin. Disseminated throughout the vegetating surface on plaques, in particular studding its periphery, are found the characteristic pustules already described from which small drops of pus can be forced by pressure. The patches, or groups, of pustules increase in size by eccentric extension, and the subsequently overlying crusts and vegetating plaques show a peripheral growth. Owing to the weaker resistance of the epithelium in the mouth and on other mucous membranes, the pustules open more quickly and small ulcers result. Following the discharge of pus and the accumulation of débris, vegetations develop on the sites of these ulcers. The same appearance of the pustules in patches occurs on the mucous membranes that is so characteristic when seen on the integument. The mucous membranes of the mouth and lips, the scalp, axillæ, genitals and perigenital region, buttocks and back are the most frequent sites of the vegetating lesions. The duration of the disease, so far as mentioned, was ten to fifteen months.

The skin lesions are amenable to local treatment with weak antiseptics and find permanent cure, leaving behind only dark, slowly-fading spots and showing no distinctive tendencies. Douchings, irrigations, local applications and inunctions with boric acid, carbolic acid and camphor naphthol were used. The lesions upon the mucous membranes yield much more slowly, owing to the greater liability to auto-infection due to the moisture and the many unavoidable points of contact, as well as the impossibility of making continuous applications of antiseptics. The prognosis, with these five cases before us is quite satisfactory. There is no mention of an accompanying eczema in this series of cases.

We have now placed before you twelve cases of vegetating dermatitis, five cases being found in infants and seven in adults, with eczema invariably present in those of the children and twice in the adult series.

In both series we note the same papulopustules and vegetations. The development of the vegetating plaques and their resolution, so far as observed, seems to be similar. The appearance of the lesions in crops, with resolution of the older as the new ones appear, are also common characteristics. The lesions of the integument are quite amenable to antiseptic treatment and the prognosis as to recovery from the affection is favorable. This manifestation is more likely to become chronic in adults and is said to have a tendency to recur. In most of the adults, the mucous membranes and genitals, or peri-genitals, were involved, while in the nurslings no lesions were found in these locations. We do not know what relation this condition bears to seborrhea or eczema, as, in many of these cases, its vegetating condition was developed independent of both, but we are inclined to the opinion that the condition was due to an infection of some kind and had nothing to do with the disease.

In concluding this paper we desire to express our thanks to Dr. Gaylord, to whose skill the accompanying microphotographs are due.

VACCINA GENERALISATA, WITH REPORT OF A CASE.*

BY M. L. HEIDINGSFELD, M.D.,
Cincinnati.

VACCINA generalisata, or as its name implies generalized, in contradistinction to localized, vaccination is one of the most infrequent form of dermatoses encountered. Chauveau states that it occurs but six to eight times in 500,000 to 600,000 vaccinations. Bondesen reports three out of 170,596 vaccinations from the government records of Denmark. Its infrequency may also be accounted for in a measure by the readiness with which slight cases may be ignored, and by the ease by which the affection may be confounded with such dermatological affections as variola, impetigo contagiosa, impetigo contagiosa bullosa, pemphigus, etc. For these and other reasons, notably the elucidation of some of the obscure features of the disease, I wish to report the following interesting case, with the kind permission of Dr. Ravogli, in whose practice I saw the case, during his recent absence in Europe.

M. M., girl, aged 5 years, was vaccinated April 10th, 1901, together

* Presented before the Cincinnati Society for Original Research, Oct. 17, 1901. by Dr. M. L. Heidingsfeld, Cincinnati.

with M. P., aged 2 years. Both vaccinations were successful, and pursued a regular uneventful course. On May 2d, M. M. was brought to my notice with a bullous eruption over both ankles and wrists; the bullæ were numerous over these areas, varying from a split pea and smaller, to an English walnut and larger, in size—arising from an un-inflamed base and were filled with clear serum. They were sensitive to pressure and distressed the patient, who manifested slight pyrexia, anorexia and general malaise. The eruption first manifested itself the preceding day, in the form of minute vesicles, without apparent sub-

FIG. 1.

FIG. 2.

jective symptoms; at that time the vaccination pustule had already healed, the scab had fallen away, leaving a slightly reddened, pigmented, depressed and cicatrized area—evidences of a successful and completed vaccination. On the following morning the larger bullæ of the preceding day had spontaneously ruptured, the split-pea vesicles had assumed the size of pigeon eggs, and a crop of minute vesicles appeared in the intervening normal areas and for a considerable distance further up the extremities. On this day photographs (plates 1 and 2) were taken and blood examination made. This process repeated itself from day to day, vesicles of one day assuming the size of

large bullæ the next, rupturing on the third or fourth day, leaving a denuded exfoliated reddened surface, which in the course of a week or ten days healed with slight pigmentation, and without cicatrization.

The eruption gradually extended up the extremities, and later involved the trunk, face, and scalp, leaving no surface uninvolved, and prolonging its attack over an interval of three months. Mucous membranes were uninvolved. Child had no previous dermatological affection and no pruritus in any form.

During this period emaciation and cachexia were marked, and slight pyrexia 99° to 100° was constant. Child has since made a complete recovery, appearance is good, weight normal, and skin is as clear and healthy looking as prior to the attack.

The nature and cause of the eruptions accompanying vaccination are very obscure, and in the effort to establish their true character, some clever investigation, and interesting observations have been recorded. At present, opinion is nearly equally divided as to whether they are caused by auto-intoxication, or by auto-inoculation.

That the eruption bears at least an indirect if not a direct relation with vaccina is conclusively proven by the interesting investigations of Jeanselme¹, who successfully inoculated cows with vaccina by means of the contents of the vesicles, and produced successful vaccinations in individuals by means of the virus from the udders of the inoculated animals. In the light of these facts, the intimate relation of these eruptions and vaccination cannot be questioned more than the relation of smallpox to vaccination.

As already stated, opinion is divided in regard to the *modus operandi* of the cause. Some maintain that it is the result of an auto-inoculation, that is to say, that the vaccine virus is disseminated to various points over the body corresponding to the respective sites of the later manifestations, by means of the patients' finger nails, garments, towels, sponges, and etc. Patients previously affected with some pruriginous dermatosis, are therefore predisposed by reason of incessant scratching, and the presence of abrasions. This opinion is substantiated by the fact that quite a few of the cases have been associated with the previous existence of some pruriginous dermatosis, entirely too frequently, I believe, for a matter of mere coincidence, in light of the low percentage of frequency of both conditions. There are some who maintain that this is a mere coincidence (Haslund²), and point out that if it were not, vaccina would be a much more common affection than it is. They ignore what I regard as a very important factor in the causation, a marked idiosyncrasy, in addition, on the

part of the patient. In our case a predisposing preëxisting pruriginous disease was absent, as also in some of the cases reported in the literature. (Darling,³ Haslund,⁴ and Gaucher.⁵)

Those who maintain that auto-inoculation is the cause, claim that areas that are protected and inaccessible to the fingers (interscapular), remain free, and that the vaccination pustules invariably show excoriations. These observations do not apply to our case, nor to some of the cases reported in the literature. (Haslund,⁶ Lederman.⁷)

A strong point in favor of the inoculation theory is the fact that the lesions frequently but not invariably take on the characteristic appearance of the vaccination pustule, pursue a similar course, and disappear with cicatrization, often slight, sometimes very extensive, features that were not marked in our particular case.

A strong point against the inoculation theory, at least in selected cases, is the relatively short period of time until vaccination immunity is established, and often the long duration of the affection. Immunity is established in the horse on the fifth day (Chauveau⁸); in man immunity is believed to be established during the second week, though successful revaccinations have been performed as late as the twelfth and fourteenth days. It is absurd, however, to maintain that successful revaccination can be protracted over a period of three to four months, as must have been true in our particular case, if the affection is to be invariably explained on the basis of auto-inoculation. (Wetterer.⁹)

Some of the cases must be accorded a different interpretation. This interpretation I take to be an intoxication in the form of misdirected vaccine virus, through the lymph or blood circulation, or the expression of reaction on the part of the patient, against intoxication from a probably intense virus, analogous to the roseola in syphilis and exanthemata of the acute infectious diseases. That misdirected virus may play the rôle in at least selected cases is evidenced by the beautiful experiments of Chauveau,¹⁰ who found that in horses, the most susceptible of all animals, if vaccine virus is administered through the respiratory or gastro-intestinal tracts, or subcutaneously, a vaccina generalisata invariably appears, not earlier, however, than the eighth day. If a cutaneous inoculation (*i. e.*, vaccination) is previously or synchronously performed, the eruption is precluded because immunity is established not later than the fifth day. If, however, the cutaneous inoculation (vaccination) is excised not later than twenty-four hours, the eruption, vaccina generalisata, appears fifteen to twenty days later. From this it can be inferred, in man, that if vaccine virus gains access to the lymph or blood circulation, it may induce vaccina generalisata up to the time immunity is established. (Widowitz.¹¹) It is inadequate to

explain cases of unusually long duration, and the eruptions in those cases are probably best interpreted on the basis of the reaction of the system against intoxication, analogous to that of the infectious diseases. The general malaise, pyrexia and emaciation would complete the picture. The occurrence of the eruption in successive crops is not, as has been claimed, a counterindication; rather the reverse, for both syphilis and herpes zoster, true types of infectious diseases, are characterized by the same condition.

In conclusion, therefore, I believe that there is good reason to believe that in a given case any of the above attributed causes can be the factor, and that those authorities who maintain that one given cause to the exclusion of all others (Wetterer,¹² Haslund,¹³ etc.), is responsible for these eruptions are in error. In all probability there are two separate types of eruption, one due to direct inoculation, or misdirected virus, of shorter duration, persisting until vaccination immunity establishes itself, and characterized by lesions of the type of the vaccine pustule; and another the result of systemic intoxication, of variable duration, with lesions atypical to the vaccine pustule both as regard course and appearance. Both require a special idiosyncrasy on the part of the patient, and have nothing in common with localized complications, like erysipelas, eczema, etc.

I regret that inoculation experiments with the contents of the vesicles, on man or animals, were not attempted in our particular case. However, I cannot concur with Paul,¹⁴ who believes that those cases must necessarily be confirmed by inoculation experiments, in order to possess significant value. The bullous character of the eruption, its recurrence in successive crops, its coincidence with a successful vaccination, its typical course, the absence of drug taking and other predisposing causes, its distinct non-resemblance to other forms of dermatoses, and its occurrence in an individual previously and subsequently free from any form of dermatoses, is sufficient evidence to render the diagnosis relatively easy and absolute, and confirmatory evidence, in the nature of an inoculation experiment, is comparatively as essential as the discovery of tubercle bacilli in a case of lupus.

With the hope that the blood examination could shed some additional light on the nature and etiology of this condition, Dr. Alfred Friedländer has been requested to kindly submit his report. I will not endeavor to interpret the interesting changes he reports, but merely wish to assert that the low eosinophilia removes the affection from the various other forms of bullous eruptions, pemphigus, etc., characterized by high eosinophilia. The blood changes noted would class the affection among the infectious diseases. It will be a matter of

considerable interest to note the blood examinations of these cases, a feature which, to my knowledge, has thus far been much neglected. It will be particularly interesting to note any variation in the cases, ascribable to auto-inoculation and to auto-intoxication, and whether or not the cases ascribable to auto-inoculation are commensurate with the examinations of the blood in vaccination, varying as they should only as regards degree.

It is greatly to be regretted that the prejudices of the parents would not allow a complete blood examination to be made in this case. It was impossible to do more than obtain smears, but even these show certain interesting features. Examination of stained specimens shows that a leucocytosis doubtless existed, which can be estimated as being about 20,000 whites to the c.m.m.

Of 675 whites counted there were:

Small lymphocytes	170	equals	25.18	per cent.
Large lymphocytes	33	"	4.88	"
Polymorphonuclears	436	"	64.59	"
Eosinophiles	36	"	5.33	"

No myelocytes were found. Only one nucleated red (a normoblast) was found in three specimens.

There was a moderate poikilocytosis, but the red cells did not show the characteristics of a marked anemia.

The low eosinophilia is striking, and is in distinct contrast to the condition usually observed in the various skin diseases with bullous eruptions. Thus the percentage is much lower than that usually found in pemphigus, which this eruption simulated so strikingly. The blood count differs also from that usually seen in variola, for the polymorphonuclears were not diminished as they usually are in that affection. The proportion of polymorphonuclears (64 per cent.) is certainly higher than the normal in a child of five, where we could expect to find lymphocytes and polymorphonuclears in about equal proportion. It is possible that this condition may be explained on the theory of infection advanced by Dr. Heidingsfeld.

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Book Reviews.

Photographic Atlas of Diseases of the Skin.—By GEORGE HENRY FOX, M.D.
Philadelphia: J. B. Lippincott Co. 1901-2. Parts I. to VII. inclusive.

One can hardly convey any idea by description of the beauty of the plates in this atlas. The title is somewhat misleading for, while the pictures are photographic reproductions, they are tinted in a style which places them in a class with the Hôpital St. Louis Atlas and "La Pratique Dermatologique." In fact, the work seems to be a publication, within the reach of modest means, of the author's edition de luxe, which in this line is incomparable. Dr. Fox has often said that the trouble with skin photographs is that they are taken of the patient and not the disease. The contention is certainly borne out by the success of his efforts. The reader fairly itches with a desire to prick the bullæ in the pemphigus case. The selection of subjects is also generally good; the exceptions it is possible to take are perhaps only differences of opinion where an author's should prevail. The average is five plates to each part.

The reviewer's task is always a hard and generally a distasteful one, but candor compels the statement that this unqualified praise cannot be bestowed on the text. Preceding the plates in each part there is in alphabetical order a consideration of the more important affections at some length while the page opposite each picture is filled with a short article on it. Statements in the two do not always agree as when comedo is held in one place to be composed of inspissated sebum and in the other, correctly, to be a follicular keratosis. Etiology, so far as specific causation goes, receives no mention whatever. Careful search has failed to reveal the presence of a single microorganism in the text. General causes are detailed at length, however.

The author indulges in his introduction in a philippic on the subject of latter day overdosing and says that a trainer in athletics can cure a psoriasis as well as he. Doubtless he scarcely expects to be taken at his word, for under the head of its treatment, old friends, arsenic, tar and chrysarobin, are much in evidence. Middle ground as usual is the only safe one. Doubtless, also, he does not rely on the curette and hygiene alone in acne, although he claims they are enough.

After all, these things are of little account, flaws easy to pick, not faults, but there is a wilful error which will have to be unlearned by the student into whose hands the atlas falls. Dr. Fox's colleagues in the American Dermato-

logical Association have before now inquired whence he derived his right to revert to pre-Hebraic days and destroy the fruits of fifty years of labor in the classification and unification of cutaneous disease. One would imagine that treatment and prognosis alone, on which great stress is laid here, would prevent an attempt to merge seborrheic dermatitis, pityriasis rosea, "lichen ruber" and a string of other equally unrelated affections into a generic pityriasis, on the ground solely that they are scaly. Pityriasis is the title attached to an exquisite picture of seborrheic dermatitis or eczema (both titles have been shown by modern investigation to be quite correct). This is unfortunate, for the plates are quite good enough to convey accurate ideas of the beginnings of dermatology.

J. C. J.

Progressive Medicine.—Edited by HOBART AMORY HARE, M.D., and H. R. M. LANDIS, M.D. New York and Philadelphia: Lea Bros. & Co., September and December, 1901.

These volumes contain the reviews of the subjects of interest to this Journal's readers. Gottheil has done the section on skin and syphilis; Belfield, as before, that on genito-urinary disease. The personal note of criticism is present in both articles and adds greatly to their value. Half tones have been reintroduced into the skin section and, in view of their helpfulness, the Journal must approve their use as it did their absence last year. It may be that they are better done than in '99. Wonderful to relate, there are thirteen pages given up to syphilis, which, by the way, is announced on the back of the December number where it is not to be found. The reviews apparently improve as years go by. Certainly, their scope is much widened and their contents embraces all there is any need for the men in other lines to know of the advance in these specialties of ours which are accused not only of having a nomenclature but an armamentarium of their own.

Society Transactions.

FRENCH SOCIETY OF GENITO-URINARY SURGERY.

FIFTH SESSION.

(*Annales des Mal. d. Org. Génito-Urin.*, 1901, p. 1320.)

Opening Address by PROFESSOR GUYON.

Movable Kidney, Pathogenesis and Indications for Operations.—DR. GUINET.

The pathogenesis of movable kidney is still very obscure, due to insufficiency of anatomo-pathological and experimental facts. For the solution of this problem we have scarcely more than the data of clinical observation, which may be formulated in the four following propositions:

1. Movable kidney is a frequent anomaly.
2. This anomaly is much more frequent in women than in men.
3. The right kidney is much more frequently mobile than the left, or than the two together.
4. This affection is more frequently met with between 25 and 40 years of age.

These propositions are worthy of being retained, but they do not throw much light upon the solution of the problem of the pathogenesis of movable kidney.

There are numerous hypotheses, but they may be embraced under these principal groups according to which we may attribute the development of the anomaly, whether to an anatomical lesion of the kidney and neighboring organs, or to a physiological cause, or to a general disposition of the organism.

I. *Theories based upon an anatomical lesion of the kidney or the neighboring organs.*

These comprise:

- a. Excessive elasticity of the peritoneum and abnormal elongation of the kidneys.
- b. Atrophy of the perirenal adipose tissue.
- c. Elongation of the renal vessels.
- d. Relaxation of the abdominal walls, to which is attached the seductive theory of enteroptosis of Glénard.
- e. Augmentation of the liver.
- f. Dilatation of the stomach.

Not one of these theories based upon an anatomical lesion noted in certain autopsies can be applied indiscriminately to every case of nephroptosis.

II. *Theories based upon a physiological cause.*

Influence (a) of menstruation leading to an intermittent and repeated congestion of the kidneys.

- b. Of pregnancy, which has been exaggerated, as the results of statistics prove.
- c. Of the corset, which cannot be denied, but is not sufficient.

To these may be added:

- d. The influence of traumatism, which acts above all as an occasional cause.

III. *Theories based upon a specific general condition, an innate insufficiency of the means of support (?) of the kidney.*

1. Theory of Tuffier, who admits a general malady, a deficiency due to the organs in general, characterized by insufficiency of the tissues. This insufficiency may exceptionally be limited to a single organ, as for instance the kidney.

2. Albarran's theory, who regards movable kidney as a veritable stigma of degeneracy. This theory would have the advantage of explaining the rôle of heredity, made by a certain number of observers; but it rests upon too scant a number of cases.

From a study of these theories it is plain that no one is applicable to all cases; there is then no one cause which can be invoked to explain the pathogenesis of this affection. To sum up: The general conditions of fixity of the kidney are those of the equilibrium of the intra-abdominal viscera; any cause which upsets this equilibrium may have a reaction upon the kidney.

From the notions acquired upon the pathogenesis of this affection it is not possible to draw precise conclusions for its therapy, and it is to the train of symptoms that the clinician should address his attention in order to make his decision. Under this aspect, movable kidney may be placed in one of three categories:

1. Those which give rise to no functional disturbance.

2. Those which are the seat of change more or less grave, as neoplasm, hydronephrosis, pyelonephrosis, etc.

3. Those accompanied by pain or digestive disturbances.

According to the author it is necessary in cases of the first category not to operate, in the second the operation appropriate to the condition is called for, in the third we may have recourse to nephrorraphy for the painful cases and for those which give rise to digestive disturbance, when we have proven that these disorders are due to displacement of the kidney. Before resorting to operation we should try the efficacy of an appropriate bandage.

Movable Kidney, Pathogenesis and Indications for Operation.—Dr. E. CHEVALIER.

I. PATHOGENESIS.

1. *Anatomic and Physiological Considerations.*—The right kidney descends lower than the left; the kidney occupies the renal fossa variably, according to sex; in man it is deep, pyriform, and contracted below; in woman, it is superficial, small cylindrical and open below, which permits descent of the kidney (Volkoff and Delitzine).

The means of the fixity of the kidney are multiple:

(a) *Adipose Capsule of Haller.*—This is composed of two portions: the adipose element and the fibrous sac.

The adipose element is more a cushion for movement than a means of fixity.

The fibrous sac, formed by the peri-renal fascia (the pre-renal and retro-renal fasciæ) have been studied by Luschka, Henle, Simon, Sappey, Zuckerkandl, Toldt, Delagenière, Gerota, Glantenay and Gosset.

By a transverse cut we may see the union between the two layers.

By a vertical we may see the two layers envelop the kidney and the supra-renal capsule becoming attached above to the diaphragm; while below there remains a space, the posterior layer passing down into the iliac fossa, the anterior passing on to the peritoneum after becoming changed to a fine tract below the lower pole of the kidney.

Some fine fibers unite the superior pole of the kidney with the supra-renal capsule (the reno-supra-renal ligament of Glénard).

The posterior fascia, the retro-renal, is the fascia of Zuckerkandl; the anterior, the pre-renal, doubles with the layer of Toldt, which is almost always wanting on the right side and on the left kidney is formed at the expense of the primitive mesocolon of transverse and descending colons, which form a right angle upon the left kidney, while the ascending and transverse colons form an obtuse angle at the level of the right kidney.

The capsule of Haller is a rather frail support of the kidney, and can only support a traction of 2 kilog. (Troquart.)

(b) *Peritonæum*.—The peritoneum passes in front of the kidney without forming a meso-nephron, the annexing ligaments of the peritoneum attach the kidney to movable organs, those not fixed, and are really a drag upon the kidney.

(c) *The vascular pedicle* prevents displacement outward and in displacements downward causes the kidney to sway: it is more firmly held on the left where the capsular vein empties into the renal vein, which sustains moreover the reno-azygolumbar canal of Lejars.

(d) *The suprarenal capsule* contributes to the fixity of the kidney.

(e) The liver, colon, duodenum, spleen and the pancreas hold an important relation by their proper action upon the kidney.

(f) *Intra-abdominal Equilibrium*.—Volkoff and Delitzine have shown that this equilibrium results from the construction of three concentric cavities. One, external contractile (external abdominal sphincter), formed by the abdominal wall (this is the most important): a middle one formed by the parietal peritoneum; an internal contractile, one formed by the intestinal tube (internal abdominal sphincter).

(g) *Normal Mobility of the Kidney*.—The kidney conforms to the respiratory movements, descending on inspiration and ascending on expiration; it tends to descend in the vertical position and ascend in dorsal decubitus. This normal movement is greater in the feminine sex, even in infancy (Rosenthal).

II. PATHOLOGICAL ANATOMY.—The surrounding fat, sometimes rarefied or having disappeared, is often found very abundant in nephropexies; the peritoneum is very variable, sometimes in folds, often normal, never forming a true meso-nephron; the vascular pedicle elongates, especially the artery; it presents anomalies sometimes; the ureter is subject to the modifications which are found in intermittent hydronephrosis. The displacements of the kidney may be slight (anteversions or retroversions) or marked; three degrees are recognized: 1. where the kidney occupies a slightly lower plane, at its superior pole still beneath the ribs; 2, where the kidney is entirely below the ribs; 3, where it is floating (movable kidney of the flank, Glénard). There may be besides mobility of other organs, hepatoptosis, enteroptosis, when subject to abnormal compressions.

III. ETIOLOGY AND PATHOGENESIS PROPER OF MOVABLE KIDNEY.

A. *FREQUENCY*.—Movable kidney is very frequent; the proportion is 30 per cent. According to Albarron 10 per cent. to 12 per cent.

B. *PREDISPOSING CAUSES*.

(a) *Sex*. More frequent in females, even in infancy (Cowby); the anatomical considerations above explain this.

(b) *Age*. Sometimes seen in infancy and even in nurslings, but the great majority of cases occur between 20 and 35 years.

(c) *Right side*. Almost always it is seated on the right side and it is more

frequently in men that it is found on the left. Bruhl gives 80 per cent. of right-sided nephroptosis; Godard-Danhieux and Albarran, 85 per cent. to 90 per cent. The left side has a better support than the right (with the layer of Toldt); the right side is subject to the influence of the liver (when subjected to effort, compression from corset, etc., digestive troubles), that of coprostasis (occurring at the obtuse angle between the ascending and transverse colon, weight of the cæcum), that of enteroptosis.

(d) *Pregnancy*. Multiparæ are subject to movable kidney (three-quarters of the cases), but nulliparæ may also be affected. The effort during confinement, and flabbiness of the abdominal wall which follows it, above all in repeated pregnancies, and those rapidly following each other, are more apt to give rise to this condition.

(e) *Relaxation of the abdominal wall*. It is also seen after evacuation of ascites, of intra-abdominal collections, operation on large abdominal tumors, or in rapid emaciation.

(f) *Affections of the internal genital apparatus*. Thiriar believes that movable kidney provokes utero-ovarian congestions, while Landau and Knapp think that uterine affections provoke movable kidney.

(g) *Periodic congestions*. Becquet (1865) believed that the congestion of the menses reacted upon the kidney, making it heavy, depressing it and in the long run creating movable kidney. Trousseau adopts this theory.

(h) *Enteroptosis*. Glénard in 1885 gives the element of ptosis the preponderant rôle: that enteroptosis is the real trouble, while nephroptosis plays only a secondary rôle in the symptomatic picture of the affection; that it is enteroptosis which is to be cared for in order to cure the nephroptosis.

Mathieu, Ewald, Litters, Landau, Albarran believe that Glénard accords too great importance to enteroptosis. Godard-Danhieux, who has well studied this affection, concludes that nephroptosis and enteroptosis show well-marked differences.

(i) *Other affections of the digestive apparatus*. Herniæ of the cæcum (Tuffier), high degree of rectal prolapse (Bazy), have produced nephroptosis. Dilatation of the stomach (Bouchard, Legendre) provokes nephroptosis in giving rise to hepatic congestion; but this may be secondary to the nephroptosis, according to Bartels, Müller-Warneck, Landau.

According to Potain, colitis may produce movable kidney from diminution of the perirenal fat. Now this should rather tend to fix the kidney (*sic*).

The liver acts upon the kidney during effort, cough, digestive maladies, wearing of corsets; marked congestion of the liver, with or without icterus, gives rise to nephroptosis by pressure. The kidney may by pressure upon the biliary ducts give rise to the icterus and lithiasis. There is frequently enough coincident hepatoptosis and nephroptosis.

C. DETERMINING CAUSES.

(a) *Corset*. Cruveilhier shows that the corset too tightly laced compresses the kidney between the liver on one side and the vertebral column on the other; the kidney then escapes from its place like a prune stone compressed between the fingers.

Belting in too tightly, above all wearing too heavy skirts, act the same way (Trousseau, Peter, Glénard, Godard-Danhieux and Verhoogen).

It is not necessary to exaggerate this cause, for many wear the corset too tightly laced without producing this condition, while Trekaki has seen 42 cases

of movable kidney in 100 Arab women who had never worn corsets or tight belts.

(b) *Increased size of kidney.* Congestion of the kidney may produce movable kidney; but degenerations of the kidney being able by their weight to depress the kidney, cause a depressed kidney rather than true movable kidney.

(c) *Traumatism.* A shock, or fall on the heels, on the knees, or backwards, a sudden effort, produce luxation of the kidney. The ordinary mechanical action which gives rise to movable kidney is slower and longer sustained.

D. HEREDITY; CONGENITAL; STIGMATA OF DEGENERATION.—The insufficiency of the precited causes, acting together or alone, has caused us to seek for the true explanation of nephroptosis in a congenital or hereditary predisposition. Lindner, Litters, Ewald, Ochsle, Bazy, Volkoff and Delitzine, Bouchard, Tuffier, Albarran above all, have shown the importance of taking note of this important factor.

IV. THE RELATIONS OF INTERMITTENT HYDRONEPHROSIS TO MOVABLE KIDNEY.

(a) *Strangulation of the kidney.* Explained by pulling upon the nervous plexus (Diehl), an arrest of the kidney in the subserous tissue (Roller), an acute attack of hydronephrosis (Gilewski), or an active congestion (Landau). The strangulation of the kidney is a sort of acute renal retention due to slight displacement (Albarran) or to a true descent of the kidney; this rôle of the kidney placed under tension has been well shown by Sinitzine, Guyon and Albarran.

(b) *Intermittent hydronephrosis.* The relation of intermittent hydronephrosis to movable kidney has been well shown by Landau, Newmann, Terrier and Bandouin.

Without detriment from slight attacks of congestion (Albarran) movable kidney has frequent attacks of slight retention, of which intermittent hydronephrosis is the higher degree. In falling from its position it undergoes a tension which brings the external border in advance or causes anteversion of the kidney (Potain) or anteflexion (Walther) or retroversion (Albarran).

In the extreme cases the pedicle of the kidney is stretched, and causes the kidney to take an oblique position downwards and inwards; then a transverse position; the lower extremity of the kidney looks inwards and forwards and the ureter undergoes important deviations.

The ureter may take the form of the letter S, may be twisted, may cause bending upon a vascular branch or upon the inferior horn of the kidney. In cases of long standing the upper portion may be in conjunction with the external wall of the hydronephrotic pouch, where it is joined by an orifice scarcely visible; often there is a valvular formation. Fibrous strands occur to fix the curvature to the vertebral column or they produce occlusion of the ureter, transforming an open hydronephrosis into a closed one.

According to Landau the cause of hydronephrosis is indeed movable kidney, as Krathauer has shown; Newmann, Terrier, and Bandouin admit this; the experience of Tuffier and that of Navarro would seem to coincide with this aspect, if those of Hildebrand and Hager did not appear to contradict it. Albarran and Legueu have shown that the kinking, not absolute at first, becomes so when the fibrous strands fix the ureter. Clinically we may agree that intermittent hydronephrosis really arises from movable kidney; since the cases of Guyon (1889), where nephropexy sufficed to give a cure, this opinion has been proven.

(To be continued.)

THE NEW YORK DERMATOLOGICAL SOCIETY.

A STATED MEETING, HELD OCTOBER 22ND, 1901.

JAMES MCFARLANE WINFIELD, M.D., *in the Chair.***Case of Nævus Pilosus.**—Presented by DR. MORROW.

The patient was a girl three and one-half years of age. The hairy growth covered the entire left half of the forehead, swept around the outer canthus of the eye and extended over the upper portion of the cheek, covering the entire malar region nearly to the nose. The hair was quite as thick and luxuriant as upon the hairy scalp.

I presented this patient simply to obtain the opinion of the members of this Society as to the most practical method of treatment. The patient was brought to me for an opinion, and has been under observation but a short time. Some surgeon had proposed operating by excision and transplantation of skin, and I was asked if such an operation was advisable or not. My impression is that it is doubtful whether an operation will materially improve the condition from a cosmetic point of view. I think that if an excision was followed by Thiersch's method of transplanting the skin, it would be very doubtful if the resulting scar would be more satisfactory to the patient than the present appearance. I also hoped that I might get an opinion from members of the Society as to the possible utility of using the X-ray apparatus in this case. I suppose there is always the possibility of a dangerous burn when the apparatus is applied to hairy tissues even when used under the greatest precautions.

DR. SAMUEL SHERWELL.—I think that a surgical operation is the best if not the only thing that can be done for this patient. I should like to show a case that I had in which the tumor was of about one-half the same size, situated in the center of the cheek and which I removed with scarcely a visible scar left. I divided the skin around the edges of the tumor, undermining the edges of the skin, and placed two silver sutures right through the cheek to take off tension, about twenty smaller coaption sutures were employed. I think the result of an operation, probably two at different times, would be as successful in the case presented as in mine. I shall be glad at some future day to show this case to the Society.

DR. EDWARD B. BRONSON.—I should like to hear if any one present has had any experience with the X-ray in the treatment of such cases.

DR. SIGMUND LUSTGARTEN.—Electrolysis might bring down this growth, but it would be extremely tedious. Surgical interference with transplantation of cutis according to the Thiersch method might improve the appearance of the child considerably.

DR. CHARLES W. ALLEN.—I have operated upon smaller growths of this nature with electrolysis, and I find that it is a very efficacious operation, although tedious in so extensive a growth. The brown pigment disappears and the hair growth in so extensive a growth as well.

DR. GEORGE HENRY FOX.—I do not think that excision, or its removal in whole or in part by surgical operation, would improve it very much, for the resulting scar might be worse than the deformity itself. Electrolysis will remove the hairs and leave a smooth patch, but it would involve much work in accomplishing this result, and in this case such a procedure might be out of the ques-

tion. On the other hand, the application of caustics, if done very carefully, would remove the hair and the part made to look like a superficial burn. But, whether this would be an improvement upon the present appearance is a question difficult to answer. I think the easiest way would be to shave the part or use a depilatory; this probably would be most satisfactory to the patient. For cauterization I always like to use that which I can best control and, therefore, the point of an electrolytic needle is best. My most brilliant therapeutic result was obtained in a case of hairy and verrucous nœvus, which was published in the *JOURNAL* and in my *Atlas*. It took much time and patience, but the warty and hairy growth, which involved the nose and a greater portion of the cheek and the lower eyelid, was removed so that scarcely any scar was left; there was no contraction or deformity of the eyelid resulting. When this patient was last seen there was scarcely any scar to be noticed upon the face. I think that the same result could be obtained in this case, but it would require an infinite amount of time and patience.

DR. PRINCE A. MORROW.—I presented this patient simply to obtain the opinion of the members of this Society as to the most practical method of treating the condition. The patient has been under observation but a short time, and the patient was brought to me for an opinion. Some physician had proposed operating upon the patient by excision and transplantation of skin, and I was asked if such an operation was advisable or not and, instead of giving an opinion, I said I would bring the child here and get the opinion of the members of this Society. My impression is that it is doubtful whether an operation will materially improve the condition present. I think that if an excision was done and Thiersch's method of transplanting the skin done, that it would be very doubtful if the resulting scar would be more satisfactory to the patient than the present appearance. I also hoped that I might get an opinion as to the possible utility of using the X-ray apparatus in this case. I suppose there is always the possibility of a dangerous burn when the apparatus is applied to tissue of this kind even when used under the best precautions.

A Case of Complete Alopecia.—Shown by DR. EDWARD B. BRONSON.

The patient, a girl, was two years of age. The affection was stated by the mother to have followed a severe attack of measles with "inflammation of the lungs," when the child was nine months old. When born there was a good growth of hair on the head, and it remained normal until after the severe illness referred to. Shortly after that the hair began to fall out rapidly, first in isolated spots on the scalp, which extending caused complete loss of hair within two months affecting not only the scalp but also the eyebrow and lashes. At present the surface of the scalp appears absolutely hairless. There are not even lanugo hairs to be seen. The eyebrows are gone, but there are a few ciliae to be seen, which the mother states have grown in recently.

DR. PRINCE A. MORROW.—I never saw a patient so young with generalized alopecia. I should be disposed to think, in view of the fact that the hairs of the eyelids and eyebrows are growing in again, that the efforts of Nature alone might possibly produce a growth of hair. Cases of generalized alopecia occurring in adults which have existed for a long period of time in my opinion are not as a rule influenced by any treatment. I think that in any case in adults where there is no return of the hair in two or three years the hair will never return. But, in the case of a child when the nutritive processes are more active and pronounced I think there is some hope that the hair may yet grow luxuriantly.

DR. GEORGE HENRY FOX.—I have seen hair grow in children a little older than the one just presented and, I think, in this case the prognosis is hopeful.

With regard to the treatment I may say that I have photographed such cases and seen the hair grow in speedily.

I do not regard photography as a therapeutic measure, but think it may be quite as effective as some of the local applications which have been highly recommended. The cure which often follows their use is due mainly, if not wholly, to the action of time and the *vis medicatrix*. Any stimulation of the scalp that draws the blood to the part tends to favor the nutrition of the hair.

DR. CHARLES W. ALLEN.—I have seen generalized alopecia occurring in quite young children, and I some years ago presented a girl of about nine years who, up to last year, had not recovered her hair; her head is as smooth as a billiard-ball. Recently I have had several cases of the ordinary form of alopecia, and the hair is growing under the application of pure carbolic acid; but, whether carbolic would be of much benefit in this case or not, I do not know.

DR. GEORGE THOMAS JACKSON.—Regarding the question of prognosis I should say that it was very doubtful in this case, whether the hair would come in or not. I believe the prognosis is usually bad in the universal cases. I remember one girl of five or six years of age; when I first saw her the hair was all gone. Later it came back very irregularly and in tufts, and it all fell out again. I have seen the girl off and on for ten or eleven years, and have seen the hair come and go several times. In the child just before us, of course, the hair may be restored entirely, but the outlook is not good.

DR. L. DUNCAN BULKLEY.—I think better results would follow in this case of generalized alopecia from internal treatment and proper feeding. I am a firm believer in the fact that there is some nutritive change taking place which we ought to meet. Recently I have seen two cases of generalized alopecia which were regarded as hopeless; under proper feeding, good hygienic surroundings, etc., and immense doses of dialized iron, the hair appeared, first white, and then turned black. Regarding this child I should say that she will recover her hair if placed under proper treatment. This would naturally occur more readily in children than in adults, because the processes of life are more active and readily respond to treatment.

DR. ANDREW R. ROBINSON.—I believe in the parasitic theory, and in no other. I do not see that this child is suffering from malnutrition. What the prognosis will be I cannot say, but I do not think that the hair follicles are destroyed. I have had the best success in such cases by using some good disinfectant and the best for the hair is, I think, alcohol. I believe I should treat this case with alcohol mixed with some of the essential oils, or a mixture of this kind:

Oil of Lavander	1 drachm.
Alcohol	8 ounces.
Oil of Cloves	15 drops.

Alcohol is supposed to be a good disinfectant and a good parasitic agent and I think the above is the best proportion for such cases as this. For localized forms of alopecia I think that chrysarobin is the best remedy.

I think the prognosis is good in this case.

DR. SAMUEL SHERWELL.—Why not include in the treatment cod-liver oil, syrup of the iodide of iron, look to the general nutrition and keep the bowels regular? I should also apply some stimulant and lotion to the scalp, as for instance, one and one-half ounce each of Spts. D  stillat. oleum ricini and cologne;

about one-half a grain of bichloride to the ounce. I also add a little sulphuric ether and a little tincture of cantharidis and a small amount of resorcin and salicylic acid as well.

DR. EDWARD B. BRONSON.—I am glad Dr. Robinson referred to parasticism in connection with that disease. It seems to me that this particular case is most easily explained on the parasitic theory. It may be supposed that the acute inflammatory diseases that preceded it was associated with some severe injury that was the cause of the scalp affection, while there is no particular reason why a parasite should show itself just at this time. The circumstances in this case favor the neuropathic rather than the parasitic theory.

In regard to the prognosis of the case I should not despair. I agree with Dr. Fox that in alopecia universalis recovery may take place. I have seen the hair grow again after the alopecia has remained complete for years.

With regard to treatment, it is a fact that most of the medicine advocated in this disease are germicides, which would seem to favor the parasitic theory. But nearly all of them belong to the class of reducing agents and are keratoplastic remedies. Such a remedy is pyrogallol, which I have come to regard as perhaps the best of all. In one case in which several different remedies were applied persistently for a considerable period to different areas of a scalp affected with the disease pyrogallol fairly outstripped them all, the area to which that was applied (a 10 % ointment) showing at the end of the period a decidedly greater improvement than the other agent.

DR. ANDREW H. ROBINSON.—Did it have anything to do with the measles?

DR. BRONSON.—It was not only measles, but, according to the mother's statement, the child had pneumonia. That a neurosis with resulting trophic changes in the skin might follow such a severe illness it seems to me not improbable.

DR. GEORGE THOMSON ELLIOT.—Michelson claimed that the cases of universal alopecia areata were parasitic. I have a case now at my clinic at Cornell University Medical College, in which the hair is growing under the use of $\frac{1}{16}$ of a grain of pilocarpin given hypodermatically once a week. The hair is growing over the beard, eyebrows, the scalp and the axilla. The case was of one and a half years' standing.

DR. PRINCE A. MORROW.—The parasitic theory is based largely upon clinical evidence. Several years ago I read a paper before the Congress at Washington in which I made a review of testimony, pro and con, regarding the parasitic nature of the disease. We find that French literature abounds in cases which support the parasitic theory of alopecia areata almost as strongly as clinical evidence confirms the parasitic theory of ringworm.

I think it is a parasitic disease, as it readily responds to stimulating and antiparasitic treatment there is no disease that comes under my observation in which as a rule I am so hopeful of cure. I have had cases under observation in which there were a number of relapses during a period of several years, eventually followed by complete and permanent cure. I give an unfavorable prognosis in all cases where the alopecia has persisted for two years or more. So far as the clinical evidences of the parasitic theory are concerned they abound and super-abound. There are numerous well authenticated epidemics of the disease in schools, convents, regiments and families. Several cases have come under my observation in members of the same family when there was a reasonably clear history of contagion. The demonstration of the contagiousness of a disease comes with it, strong presumptive evidence, at least, of its parasitic nature.

DR. GEORGE HENRY FOX.—I should like to ask Dr. Morrow how he accounts for the fact that a large proportion of cases get well without treatment at all, or at least, with treatment that practically has no effect. Other parasitic diseases do not follow that course.

DR. SAMUEL SHERWELL.—This case referred to occurs at an age when parasitic diseases are not at all common. Another point made, referred to the reappearance of the hair in tufts; how do you account for that if this is a parasitic disease? I should think that if it appeared in tufts it would plead against the parasitic disease rather than for it; it would seem to me that it speaks more in favor of a neurosis.

DR. GEORGE THOMSON ELLIOT.—I should like to ask Dr. Morrow if there is anything more positive than clinical evidence that cases of alopecia areata are parasitic. All of us have seen cases get well whether treated or not. I have seen a number of cases treated by the most extensive parasitic means possible without effect. It would seem that this being the age of germs, one presumes that a disease uncertain in its pathology must be parasitic in nature. More, however, than presumption is necessary in establishing the fact, and most certainly, as far as alopecia areata is concerned, no definite proof of its parasitic nature has been brought forward. Dr. Robinson has stated that he produced areas of alopecia absolutely identical with those of alopecia areata by injecting in the scalp cultures of *staphylococcus epidermidis albus* (Welch). This *staphylococcus* is, however, a normal, so to speak, parasite of the skin, and being always present, why does it not produce its effects—alopecia areata—in every one. I do not believe that true alopecia areata is parasitic in nature, but that many cases so-called and which appear to be contagious are cases of bald ringworm or of some other unidentified affection.

DR. PRINCE A. MORROW.—As I stated before, the parasitic theory is chiefly based upon clinical evidence. There has been no evidence from the bacteriological side which proves conclusively that alopecia is a parasitic disease. Several observers have claimed to have discovered a parasite which they regard as the pathogenetic agent but they have not been confirmed. There are a great many diseases which we accept as parasitic where we have been unable to find the microbe—at least, it has never been identified as specific and peculiar to the disease in question; but from analogies of alopecia areata with other diseases which have been proven to be parasitic, from its peripheral mode of extension and course, and its response to parasiticidic remedies its clinical behavior seems to be more in conformity with the parasitic theory than with any other. In considering the tropho-neurotic theory there are arguments just as strong against its nervous origin. How can you explain its origin from a neurotic condition in cases where there has been no traumatism, nerve lesions, mental shocks or general nervous debility, which could possibly account for it. In most cases the general health of the patient is perfect. I do not believe that the facts as observed fits in with the neurotic theory as well as with the parasitic theory.

There are numerous epidemics of alopecia recorded in literature, no such analogical evidence can be adduced in favor of vitiligo. Outbreaks of alopecia have been reported in the same school where it was a very common thing for the pupils to wear each other's caps. One of my cases reported at the Washington meeting was that of a young man with alopecia who was home from school on a vacation. His sister wore his cap and, soon after, returned to Smith College where, three or four months later, she developed an alopecia which

rapidly swept the hair from one-half her head, from the eyebrows, from the axilla and from the pubes. She recovered entirely, but her brother did not. I think the clinical evidence as furnished by the French writers is very conclusive. Certainly cases of vitiligo cannot be brought forward as parasitic in origin.

A Case of Atrophy of the Nails.—Shown by Dr. BRONSON.

DR. BRONSON presented a case of atrophy of the nails shown at the meeting in February last. At that meeting the suggestion had been made by some of the members present that the syphilis from which the patient had suffered sixteen years before might, notwithstanding its symmetrical and other characters that did not correspond to syphilides of so late a stage, be the cause of the present affection. After a course of thorough antisyphilitic treatment pursued for three or more months no improvement whatever was noted, but the case became decidedly worse. For the past three months the patient has been treated with arsenic (arsenite of potash, $\frac{1}{2}$ grain per diem and at present shows a very marked improvement. The nails are all growing well, the appearing of the new formed nail substance being perfectly normal.

DR. CHARLES W. ALLEN.—I think this is a very good result. Arsenic I consider to be a good remedy in many affections of the nails, but I think one of the things we are apt to forget is that it may prove beneficial in some manifestations of syphilis. These nail changes sometimes prove to be extremely obstinate.

DR. JOHN A. FORDYCE.—I should like to ask Dr. Allen in what manifestations of syphilis is arsenic good.

DR. ALLEN.—In certain old skin and nail lesions which do not tend to go away, under mercury and iodides.

DR. SAMUEL SHERWELL.—I should like to ask Dr. Bronson if he gave mercury as well as arsenic.

DR. EDWARD B. BRONSON.—For the past four months he has been taking arsenite of potash, which has been gradually increased from about $\frac{1}{2}$ up to $\frac{3}{4}$ grain a day. Mercury had been given previously for a considerable period, but during this time the disease of the nails had steadily grown worse. The only local treatment was a bichloride lotion which was stopped four months ago.

A Case of Acne Varioliformis of Legs.—Shown by Dr. BRONSON.

K., aet. twenty-four, of good build and healthy appearance, with good personal and family history, showing no evidence of tuberculous or syphilitic taint. About three years ago first noticed a peculiar lesion on the inner side of the right leg, midway between knee and ankle. It had the appearance of a small red spot that was partly scabbed over. It was slightly painful on pressure but no other sensation was noticed. It was observed that the spot gradually extended; whether its spread was altered with the formation of new lesions the patient is uncertain. There was never any distinct suppuration nor ulceration, though he remembers that at once the surface seemed slightly abraded and moist. When the scale or scab fell off a scar remained and nothing further occurred the patient thinks until March last—seven months ago, when other lesions of a similar character appeared on both legs. No disturbance of sensations, neither itching nor pain, attended the eruption, which but from its unsightly character would have never attracted his attention.

At present both lower legs are studded on all sides with dirty brownish red spots. These for the most part in size, vary from miliary to lenticular and some are larger. Nearly all the spots are slightly depressed below the niveau and atrophy. The larger ones usually show two or more independent seems or

atrophic depressions. On a large proportion of them there is a scale or scab in the center which is of a yellow color like favus, but the edges are free and they are easily detached. Underneath the scab the surface is of a dark purplish color and almost invariably cicatricial. Generally the lesions appear to have begun at the sites of hair follicles, and for the most part appear in little groups. On the inner side of the right leg the site of the original lesion of three years ago is marked by an oval depressed scar two inches long and one inch wide, showing on its surface several deeper depressions, each the size of a little finger nail. The color of the patch is brownish with the purple veins showing plainly. On the left leg are two similar large cicatricial patches, one on the peroneal aspect midway between knee and ankle, oval in shape and of about the same size as the patch on the right leg. The outer atrophy patch on the left leg is more round in shape and about one and one-half inch in diameter. The general appearance is that of some disease in the stage of involution. Nothing that looks like new or recent lesions are to be found.

DR. ANDREW R. ROBINSON.—It might be favus or it may be a tuberculide.

DR. L. DUNCAN BULKLEY.—It is undoubtedly a tuberculide.

DR. SIGMUND LUSTGARTEN.—I should say that it was a tuberculide, although it reminds me somewhat of an affection the French describe as beginning in the follicles, the inflammatory process extending into the derma, healing occurring with atrophy.

DR. CHARLES W. ALLEN.—When I first saw the case there were two or three small scales which suggested to me favus. Favus dips down into the tissues and I would keep this diagnosis in mind until it was excluded by the use of the microscope. If favus is not present I would look upon it as a folliculitis of some kind.

DR. FORDYCE believed the case to belong to the group of diseases which it is now the fashion to call "tuberculides." It is closely allied to the case described by Bronson several years ago as *acne varioliformis* of the extremities. The eruption is histologically a granuloma in which rapid necrosis of the new cell deposit takes place.

In the October number of the *British Journal of Dermatology* a case is described with similar clinical features in which tubercle bacilli were discovered.

DR. EDWARD B. BRONSON.—It resembles favus only in the color of some of the scabs. The scales are loosely adherent and are not cup-shaped; they are quite granular and there is no cuticle covering them. In fact, there is so little in which they resemble favus that I never seriously entertained the idea of its being that disease.

A Case of Tubercular Leprosy.—Shown by DR. ELLIOT.

Duration—about two years; location—face, arms and thighs. Tubercles, small shot to bean size scattered over thighs and arms. Appeared first on forearm and reaching bean size, began disappearing and are now about split-pea size. Patient states all the tubercles are growing smaller and no new ones are appearing.

DR. GEORGE THOMSON ELLIOT.—The man has improved in a remarkable degree under chaulmoogra oil. The patient entered the hospital on the 4th of October and has been but eighteen days under treatment and the lesions have improved decidedly. He is now getting twenty drops of the oil three times a day; he takes it in milk and it agrees with him.

DR. PRINCE A. MORROW.—I would say that it seems to me from my observa-

tion of a large number of cases of foreign lepers who have come to this country that it is very difficult to differentiate between the results of treatment and the improvement which naturally follows the changed conditions of food, country and climate. I have seen several cases of tubercular leprosy improve materially without any treatment, the nodules diminishing in size and I remember one case, a man from Brazil, who had large anesthetic areas upon the abdomen and thorax, which cleared up and the sensibility returned with practically no treatment. In saying this I do not wish to depreciate the value of chaulmoogra oil, because I believe that, in some cases, it is of value.

DR. ELLIOT.—The patient has been in this country for some time. He has had a change from an out-door life to the hospital life.

DR. MORROW.—Has the nutrition improved?

DR. BRONSON.—The nutrition was perfect when the patient came in. He has been here at least six months. It seems to me that, in this case, we can attribute some of the change to the chaulmoogra oil which he has been getting for only two and a half weeks; there is a decided change in the lesions and in his general appearance.

DR. MORROW.—Does he tolerate the oil well?

DR. BRONSON.—Only when taking it in milk.

DR. MORROW.—I have had a number of patients who could not take the chaulmoogra oil put up in this city, yet they could tolerate the oil which was put up in capsules by a firm in Paris without difficulty. I have noticed this particularly in three cases. Now, whether this was due to the chemical qualities of the oil, or to the more refined product, being freer from impurities, could not be determined. I have used in cases when the oil could not be tolerated the gynocardate of sodium, and I would suggest its use in Dr. Elliot's case.

A Case for Diagnosis.—Shown by DR. ELLIOT.

Location, general; duration, about five years; started on inside of right arm, patient next noticed white blotches on neck. At time of admission to hospital skin showed an infiltrated fissured bleeding surface generally, hands badly fissured. Body presents circular and semi-circular patches generally; considerable weeping, especially on back, chest and axilla; lower part of body and legs presenting a dryer appearance and some scaling.

DR. SIGMUND LUSTGARTEN.—This is an interesting case and is probably one showing the early stage of mycosis fungoides.

DR. PRINCE A. MORROW.—I should recommend that Dr. Elliot take a photograph of this case, showing the condition especially of the forehead. We have pictures in skin atlases showing the pre-mycotic stage of mycosis fungoides and also fungoid, the stage with characteristic tumors are well developed. Here is a case in which the tumors are just beginning to sprout, or develop upon the forehead and illustrate a characteristic phase of the disease. I think that a picture of this case would be an excellent contribution to the pictorial representations of mycosis fungoides.

DR. SAMUEL SHERWELL.—How long has the eruption existed?

DR. ELLIOT.—Five years.

The improvement in this case was also something remarkable, the patient being put on chaulmoogra oil; really, the improvement was something marvelous. I have seen the same result in a case in private practice where the disease has been going on for seven years and was completely controlled by chaulmoogra oil during the past few years. Once or twice a year small fungoid

tumors sprung up. The patient was given chaulmoogra oil in pill form, five drops in each pill, and twelve being taken each day, an equivalent to sixty drops a day.

DR. PRINCE A. MORROW:—That is the logical treatment of the case which is designated by the French "indigenous leprosy." I think I should try cacodylate of sodium which I have used both by the hypodermic method and by the stomach, and which has such remarkable results in bettering the nutrition of the skin.

A Case of Lichen Planus.—Shown by Dr. Fox.

Girl, 8. Lichen planus, two months' standing. Rapid evolution of disease, the lesions losing color and flattening under R. & S. Eruption limited chiefly to trunk.

Man with hypertrophic lichen planus lesions on back of hand, a few on leg of one month standing, and typical lesions on body.

DR. CHARLES W. ALLEN:—Since the question of diagnosis has come up in the case of the little girl, I should say that it was undoubtedly a case of lichen planus.

DR. JOHN A. FORDYCE:—I think it is rather unusual and unique to see such a condition in so young a child.

A Case of Morphœa.—Shown by Dr. ALLEN.

DR. ALLEN presented a private patient, 26 years of age, whom he had shown a year before with patches of morphœa upon the cheek. Treatment had been carried out by means of the electrolytic needle with favorable results.

DR. CHARLES W. ALLEN:—I have also recently had a little girl with morphœa involving areas over both thighs and legs, which is nearly well under the use of electrolysis. The plaques here occur in bands and rounded plaques up and down the leg.

A Case for Diagnosis.—Shown by Dr. DADE.

DR. PRINCE A. MORROW:—I think this is a case in which the diagnosis lies between dermatolysis and fibroma molluscum. It might be termed fibroma molluscum, although in fibroma molluscum we usually have the tumors more generalized and more sharply defined and delimited, smaller in size and of different consistence.

DR. GEORGE HENRY FOX:—I should regard it as a hairy nævus which must have been congenital.

DR. JOHN A. FORDYCE:—I agree that it is probably congenital and that it has increased in size.

DR. CHARLES W. ALLEN:—I think that it is a congenital nævus.

DR. SIGMUND LUSTGARTEN:—I am inclined to look upon it as a case of fibroma molluscum. There seems to be a number of pigmented lesions upon the body and a close examination may reveal the pigmented soft tissue which shows it to be very rich in embryonic cells and young connective tissue. If it is a simple nævus it has too many unusual features. I think it is an unusual case of fibroma molluscum.

DR. EDWARD B. BRONSON:—I think the term dermatolysis is an unfortunate one. This term should only be used where there is great looseness of the skin. In this instance there appears to be a distinct hypertrophy of all the tissues of the skin differing in that respect from molluscum, which is characterized by an increase in the loose connective tissue, which is protruded through the cel-

lular epidermis. Here all the elements of the skin are increased including the pigment. The term Pachydermatocele is more applicable than Dermatolysis.

DR. L. DUNCAN BULKLEY:—I do not think we should apply the term pachydermatocele to this case, but molluscum pendulum. There are many cases like this having also nævoid connections. Under the microscope we may probably find it to be a case of fibroma molluscum.

DR. ELLIOT:—Whether this is a fibroma molluscum or a nævus molluscuformi I do not know and I should like to examine the case more closely before expressing an opinion.

A Case of Pruritus Hiemalis.—Shown by DR. BRONSON.

DR. GEORGE HENRY FOX:—This seems to me to be an interesting case of pruritus, purely neurotic in nature, with some secondary lesions of the skin produced by the scratching. Hiemalis is a term that I do not like, for there are many skin diseases that are worse in winter and the term might be even applied to eczema and other diseases as well as to this one.

DR. L. DUNCAN BULKLEY:—I think the papules are secondary lesions, the result of the scratching, because they heal without any tendency to exudation. I like the use of the term pruritus hiemalis, because so many cases appear during the winter.

DR. BRONSON:—Perhaps I owe an apology for presenting this case before I had studied it longer and had obtained a completer history. However, the patient has distinctly told me that the trouble has been worse every winter during the past three years. It is a temperature itch, and it is at least aggravated in winter. The cutaneous lesions are quite insufficient to account for the pruritus and such as they are are clearly traumatic and from the effects of the scratching.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

Wednesday Evening, November 20, 1901.

W. K. OTIS, M.D., *Chairman.*

PRESENTATION OF CASES AND SPECIMENS.

DR. GUIERAS:—Mr. President, I have two kidneys here which I removed last Tuesday afternoon. The first specimen I think is one of hydronephrosis. It has not yet been submitted to the pathologist and it may possibly be a kidney containing multiple cysts, but I think it is hydronephrosis. This patient entered the hospital about six weeks ago, having been sick for two weeks. His trouble followed a fall which he had had two weeks previous, at which time he landed on his left side. After that he began to have pains in the left loin and the abdomen gradually increased in size until when I saw him in the hospital the whole abdomen was distended, so that it resembled a gravid uterus at full term. From the history of the case, the location of the pain and the fact that the left loin was a little fuller than the right, although the patient had no symptoms of renal colic and had no symptoms previous to the fall which indicated kidney trouble, it seemed to me that his condition depended upon his kidney. As I

did not know just what I had to deal with, I made an anterior incision first over the region of the kidney. I cut down into the peritoneal cavity and found that the visceral and parietal layers came together in such close approximation that the collapsed intestines were spread out like ribbons, lying flat on the posterior peritoneal surface, which was pushed up against the anterior abdominal wall. This exploratory incision satisfied me that I had to deal with an accumulation behind the peritoneum, which was probably fluid and the result of a ruptured kidney. I evacuated three and a half gallons of blood and urine. It was of a light permanganate color. I could then feel in the lower border of his kidney a rupture. I could put my finger in through this rupture to the kidney pelvis, which I examined down the ureter a little way without being able to feel any obstruction, then as the patient's condition was bad I closed him up again, having fastened a drainage tube in the pelvis of the kidney. The patient did very well for some days and then his temperature and pulse began to go up and his abdomen become very much distended again. I found that the large catheter which I had put into the pelvis of the kidney for drainage had slipped out, and the house surgeon, in dressing the wound, had pushed it in between the skin and the erector spinæ muscle. I opened the space posterior to the kidney and about a gallon of a yellowish fluid, which proved to be a mixture of urine and pus, gushed out. A tube was put in and for about five weeks the patient has been draining through the loin. He has run a temperature of from 99 to 101 and a pulse from 90 to 110. As he had become anemic and cachectic, I decided to remove the kidney. Accordingly, on Wednesday I opened my incision again and found the kidney, which consisted principally of a very large sac. There was some kidney tissue left, but the sac was very noticeable, probably resulting from the distention of what had been a hydronephrosis. There were a great many adhesions present, which were liberated with great difficulty. The pedicle of the kidney was, I should think, from four to five inches wide, with a number of large veins running through it. After trying for a long time to free the kidney so that I could remove it, the patient's condition became such that I was obliged to dissect the pedicle and leave in a part of this sac of the hydronephrosis. The ureter was very much distended, I should say just at the junction of the kidney, at least the size of the wrist. I did not follow the ureter down, as I had intended, on account of his condition, but I am of the opinion that there is a probable stone in the lower part of the ureter, near the bladder. This patient is now doing fairly well. Perhaps later on I will make another incision and see if I can find the stone.

The second specimen is a kidney I removed from a boy of 20, who came in the hospital about two weeks ago—a week before the operation. This patient had a history of being sick for about three weeks previous to his entrance. He had had pain and swelling in his left lumbar region. Temperature on entering was 104; pulse was 110. The patient had been kept in bed, given diluents, until his temperature went down gradually to 101, his pulse to 90 to 100. The kidney could be very clearly outlined; came down about $1\frac{1}{2}$ inches below the umbilicus and extended further than it should in each direction laterally. I made an incision in the lumbar region, exposed the kidney and examined it. It seemed to be tuberculous. It was enlarged, inflamed, and there were numerous small abscesses in its upper pole. I present the specimen for examination. The patient was put to bed and during the first twelve hours he passed sixteen

ounces of urine; that was up to noon of last Thursday, six days ago, since which time he has passed no urine at all—complete suppression. His condition is still fairly good, however. Pulse ranges from 100 to 110. He is conscious, although, of course, his mental faculties are not clear. He has had no uremic symptoms, although he seems to be gradually sinking into an uremic condition. We have tried everything we knew of—internal medication, hot packs, cupping, digitalis poultices, the hot rectal douches, rectal irrigations—nothing seems to start his urine. Every day he is catheterized twice and no urine has yet been drawn. This patient's urine had shown evidences of renal disease. He has had blood, albumen, renal epithelium and casts.

Epithelioma of the Penis.

DR. PEDERSEN:—This specimen was removed from a patient 45 years old. As described by the patient, the growth began some two years ago in the form of a small nodule, that appeared on the inner surface of his foreskin. It grew very slowly and it was not until early last summer that he called his physician's attention to it. His physician passed it over as a trifling matter at first, but later, after a consultation, circumcision was performed and the base of the now warty growth was thoroughly curetted. This was last August. From that moment on the lesion grew very rapidly, and the patient was brought to Bellevue Hospital about two weeks ago. The patient had declined operation at an earlier date, his physician tells me, and it was only after the ulcerating mass eroded the blood-vessels and two or three very sharp hæmorrhages had taken place that he had consented to undergo a radical operation. While in the hospital, and before we had an opportunity to take a section of the growth, he had a severe arterial hæmorrhage. Two good sections were taken and the pathologist reported typical epithelioma. Nine days ago I did a circular flap amputation and removed the penis close to the tissues at the pubes. The small stump is flush with the tissues of the pubes. An inlying catheter was maintained until the fourth day and then removed. Healing took place by primary union.

Urethral Calculus.

DR. T. M. TOWNSEND:—In Dr. Valentine's absence this evening, I beg the privilege of presenting this case on his behalf:

On November 14th Dr. V. Sellaro brought to the office G. J., Italian, married, laborer, aged 45, the father of two children.

The patient had had one gonorrhea five years ago, which appeared four or five days after suspicious intercourse and, according to the patient's recollection, lasted two or three weeks. This only attack was not attended by complications, nor had it any sequelæ which the patient recalls.

Three years ago, without any precedent symptoms, he was suddenly taken with dysuria, swelling of the penis, followed by bloody urination. The patient does not recall whether his urethra bled independently of urination nor how long the discharge of blood continued. Throughout, efforts at obtaining a precise history were in a great measure ineffectual, owing to the patient's limited powers of observation.

He said, however, that neither erections nor coitus were painful since the attack he described.

The external genitalia were normal to inspection, except as to a free thick whitish excess of urethral secretion which presented at the meatus.

The first urine (150 cc.) was clear and contained coarse thick shreds, long and medium, coarse filaments which sank to the bottom of the tube.

The second urine (60 cc.) was clear, with fewer floaters than the first.

Urinalysis made on the following day by Dr. Louis Heitzman showed:

Specific gravity, 1028.

Reaction, acid.

Albumen, none.

Sugar, none.

The features under the microscope are:

Crystals and concretions of oxalate of lime in rather large numbers.

Pus corpuscles—in moderate numbers, many containing fat globules.

Epithelia from urethra and prostate gland—few to moderate.

Epithelia from pelvis of kidney and ureter—few to moderate; with some fat globules.

Epithelia from convoluted tubules of kidney—few.

Mucus—abundant.

Red blood globules—few.

Epithelia from upper and middle layers of bladder—few.

The microscopic diagnosis therefore would be *Pyelitis calculosa*.

Palpation of the penis showed at the junction of the middle and posterior thirds of the pendulous portion in the lower aspect of the right corpus cavernosum and involving the corpus cavernosum urethræ, a very hard, rough, irregular body, firmly imbedded in the tissues.

Tactile exploration of the urethra with a rigid sound (21F.) conveyed the sensation of the anterior surface of a dense stricture at the junction of the middle and posterior thirds of the pendulous portion. In addition to this resistance there was a rough grating as of a stone with a very coarse surface. This stone was immobile.

Urethroscopic examination was necessarily limited, as the meatus would admit no instrument of a larger caliber than 21F. On reaching the point above described, a dense, white circular cicatricial band could be clearly discerned; on pressing the tube against this band a small part of the stone could be brought into its lumen.

Attempts at removing the foreign body through the urethroscopic tube proved futile, as its greater part was firmly imbedded in the tissues, even had it been movable, its size would have prevented its extraction through the tube.

Removal of the calculus was accomplished as follows: A Dittel serrated foreign body forceps was inserted through the stricture, and while the stone was steadied with the left fingers the tissues holding the stone were gently scraped from its surface, by first placing the jaws of the forceps closed upon the exposed surface of the stone, then slowly opening them, following the irregular contours of the stone. When the mucosa covering the calculus had been peeled from it in this manner, it was found that the alligator jaws of the forceps were not large enough to grasp the stone. Hemostatic forceps with long, narrow jaws were then inserted, the stone grasped, and after gently turning it to find the line of least resistance it was laid free in the urethra and withdrawn.

Not more than 5 cc. of blood were lost in the operation.

After removal of the stone a 5 per cent. suspension of iodoform in glycerin was injected.

Presentation of Patient for Diagnosis.

DR. GUITERAS.—This man is a driver, 21 years of age. He states that six months ago he had ulcers on the penis, lasting for four weeks. Following this he had sores in the mouth and slight sore throat. Two months ago the patient noticed that the lymphatic glands in the right side were enlarging and becoming painful. Two weeks later small abscesses appeared on the inner and posterior surfaces of the right thigh. Some would heal and others break out. They itch, are tender, break, discharge a dark, gummy substance containing blood and pus. I present the case as one of bubo with a peculiar complication that I do not feel sure of and as a doubtful case of syphilis.

DISCUSSION.

DR. JOHNSON.—In the first case the result seems to have been very satisfactory. In the second specimen which Dr. Guiteras has shown, although I should hesitate to pronounce any positive opinion upon the appearance of the specimen in its present state, yet it certainly closely resembles to my eye a pyelonephritis with a localization in one pole of the kidney. There are upon the surface of the organ a number of yellowish nodules elevated above the surface and an induration of a portion of the kidney beneath these nodules, which would rather indicate to me that the disease is of that type. Possibly, of course, it may not be. I would not like to express it very positively. At the same time it is not beyond the bounds of possibility that the disease in this case may have been bilateral.

DR. BOLTON.—The first case, the hydronephrosis, illustrates very well one of the main advantages of the transverse incision for exposing the kidney. If that scheme had been adopted and an incision made parallel to the border of the ribs from the erector spinæ muscle forward, even as far as the rectus muscle, it would have been a very simple matter to incise the peritoneum at the anterior angle of the incision and open the abdomen without the necessity of turning the patient at all.

DR. BIERHOFF.—With reference to the first case Dr. Guiteras presented I note that he expressed some doubt as to whether there was present vesical calculus, or vesical calculi, or a urethral calculus. I am surprised at that, for the deciding of that question is so very easy that in a case of mine I should prefer to decide that before operating.

In regard to the second case several questions arise. The first is, why did Dr. Guiteras remove that kidney? The question is, On what did Dr. Guiteras base his diagnosis of tuberculosis of the kidney? If I understood the report of the case correctly, there is no mention made of the bacillus tuberculosis having been found. How did Dr. Guiteras decide that there was a second kidney present? How could he know what was the condition of that second kidney, if there was a second kidney present? And finally, I would say it seems to me, from listening to the report and the subsequent history of the patient, that it is not at all unlikely that Dr. Guiteras removed a healthy, somewhat hypertrophied kidney, which was performing the function all by itself—its own functions and those of the other diseased kidney. If I may sum up my remarks upon the second case, I should say that its chief value to us must be as a warning of what not to leave undone.

DR. GUITERAS.—With regard to the first kidney and whether the patient has had hydronephrosis or not I do not know. Nothing in his previous history

pointed to it, although the history of the accident indicated it and the operation confirmed it. The reason I made the anterior incision was because it was a case where I was not sure of my diagnosis, and as the tumor was so large I thought by an incision anteriorly that I could explore more satisfactorily.

In the second case there were no tubercle bacilli found in the urine, although the urine was not examined by an expert. The history of the patient, the record of temperature, the feeling of the kidney by examination and palpation, the urinary examination, all tended to show me that the kidney was enlarged and acutely inflamed; but it was not until I had made my incision and freed my kidney that I came to the conclusion that it was a probable case of tuberculosis and should be removed. It may, however, be a case of pyelonephritis, but there was no pus in the urine, and it seems to me rather rare to find a case of pyelonephritis without having pus in the urine. Of course it may have been a case of suppurative kidney where the foci of suppuration have developed through the blood and had not ascended from the pelvis of the kidney. The patient, however, has had no cystitis and no pyelitis, as was determined by urinary examination.

DR. BOLTON.—It is quite interesting from a diagnostic point of view to realize at what an early period of life these carcinomata of the penis may develop. In the last three years I have seen three patients with carcinoma of the penis—one 27, one 26, and one 23 years of age.

DR. MANLEY.—I would like to ask Dr. Bolton about the history of those three other cases because I have seen quite a number of cases which had been diagnosed microscopically as epithelioma in young men which had turned out by treatment to be chancroids, and that was the reason why I should like to inquire what was the final outcome of those three cases which had microscopically been diagnosed as epithelioma.

DR. BOLTON.—One of them I saw at Bellevue Hospital, pronounced carcinoma. The other two at the New York Hospital, pronounced carcinoma there. The patient in whom the disease developed at the age of 23 had also a glandular deposit in his groin. I saw him the other day and he had a recurrence in the groin.

THE CHAIRMAN.—I have had to deal with quite a number of these urethral stones and haven't found the endoscope of any service in removal. On the contrary, they are much more easily removed through the urethra with the forceps in the way in which this one was removed or else pushed backwards into the bladder and crushed with a small lithotrite.

DOCTOR KLOTZ.—I was not present when the history of the case was reported, but from their appearance I believe that some of the conditions found on the patient are due to syphilis. The soft swellings in and around the groin I consider as suppurating glands not of gummatous origin, and the lesions on the scrotum as simply foci of suppuration due to some pus infection. But there is a larger, coherent patch of slightly scaly, flat papules on the inner aspect of the right thigh, which I do not doubt is of syphilitic origin.

DR. LAPOWSKI.—I consider the case as a plain follicular infection.

THE SECRETARY.—I am inclined to agree with Dr. Lapowski.

DR. PEDERSEN.—I am inclined to agree with Dr. Lapowski. I would not be willing to say there was a syphilitic character to the lesions present in the groin and the upper part of the thigh. I had under my care at the Post-Graduate Hospital two or three summers ago a patient similar to this one, both in his

physical appearance and in the character of the lesions present. These proved to be a mass of infected glands in various stages of suppuration. A very radical dissection was required to clear them out.

DR. GUITERAS.—I never saw the case before last night, and the history of syphilitic trouble is not clear. I did not present him on account of his general condition, although, of course, that is interesting. I presented him particularly for the condition in the groin and on the inside of the thigh. I did not know whether it was folliculitis, tuberculosis of the skin, or what the condition was, or its relation to the bubo.

The Surgical Treatment of Certain Suppurative Conditions of the Kidney.

DR. A. B. JOHNSON read a paper with this title.

The lesions considered were:

1. Acute pyelonephritis with the production of miliary abscesses.
2. Pyonephrosis.
3. Localized suppuration in the kidney (kidney abscess).
4. Hydronephrosis with secondary pus infection.

The operative treatment of these various conditions was discussed, especially the question as to whether nephrotomy or nephrectomy was to be the operation of choice. Several instances were related in which nephrectomy had proved a life-saving operation in cases of acute pyelonephritis involving one kidney; and several cases were quoted from the literature of the subjects showing that when but a small portion of one kidney was involved in the process partial nephrectomy had been successful.

Pyonephrosis was spoken of at some length.

The writer drew the conclusion, based upon the nature of the lesions, upon the experience of others, upon certain statistics quoted, and upon his own experience, that nephrectomy, rather than nephrotomy, was to be regarded as the operation of choice.

The treatment of localized suppuration in the kidney—kidney abscess, so-called—he believed, on the other hand, should be conservative. Hydronephrosis with subsequent infection of the sac was a condition permitting the successful use of a variety of conservative operations chosen to fulfil the particular indications of the individual case.

The septic complications were not usually so menacing as in cases of pyonephrosis.

In certain cases incision and drainage could be followed later by a suitable plastic operation for the reestablishment of a direct channel of communication between the kidney and the urinary bladder. In general nephrotomy was the operation of choice.

DR. BOLTON.—This question is such a large one it is difficult to attack it at more than one point at a time. The novel proposition that is before us is to attempt the relief of the patient suffering from acute suppurative pyelonephritis by surgical means. This condition very usually up to within a few years was regarded as almost inevitably fatal. The first case of this kind that came under my observation is a rather interesting case. It extended over several years. It was a man, say 27 years of age, who had had scarlatina a few years before I saw him and in consequence of that had at the time chronic nephritis of moderate severity. When I saw him he had a posterior urethritis which quickly extended to the bladder. I sent him to St. Luke's Hospital under the care of

Dr. Bangs. He was there for some time and the severity of his symptoms decreased to such a degree he was able to leave the hospital. Two or three months later he became septic; had chills; had a septic temperature of 105° in the afternoon, 102° in the morning, and with that had pain and tenderness in both loins, which was more marked on the right side than on the left. In this condition he was sent to the New York Hospital under the care of Dr. Weir, who exposed the right kidney, in which the pain was more marked than in the left, and extirpated it. On incision the kidney was found to be twice its normal size, presenting in section typical pyelonephritis. The general symptoms of sepsis almost at once subsided without any trouble, and at the end of six months the patient's urine was practically the urine of one suffering from a mild degree of chronic nephritis. Specific gravity about 1010 to 1012 containing a little albumen. For the next year the patient enjoyed a fair degree of health, and at the end of this time he began to suffer from a progressive chronic nephritis, from which he went on and died. He unquestionably had a bilateral pyelonephritis added to chronic diffuse nephritis. He went on and died of his chronic diffused nephritis, and whether this was aggravated or influenced in any way by the occurrence and the disappearance of the pyelonephritis I am unable to say.

DR. GUITERAS.—The paper of Dr. Johnson was an interesting one and I must congratulate him upon the results he has had; also the results obtained at Roosevelt Hospital, because they are the best statistics I have yet had the pleasure of listening to or read.

In regard to the question of pyelonephritis it seems to me that Dr. Johnson's views coincide with mine. Perhaps in cases of calculus, where there is one large abscess, the calices of the pelvis being involved, and some of the kidney tissue secondarily to it, a nephrotomy might be the better operation, and after removing the stone and satisfactory drainage the kidney might perhaps regain its function and the suppurative processes cease. In all tuberculous cases, though, it seems to me if the kidney be involved the best thing to do is to remove it. If the kidney is not removed and a nephrotomy is performed, then we have exactly the tuberculous sinuses spoken of. These tuberculous sinuses last a long time—may last for years, and the suppurative condition is such that the patient's general condition is very much affected by it. I have a patient now under observation upon whom I performed a nephrotomy some years ago for tubercular abscess of the kidney and who still has a discharging sinus. I think now I should have performed nephrectomy, as the patient has amyloid degeneration of the liver and I presume of the other kidney.

Again, secondary nephrectomy that Dr. Johnson speaks of is a most difficult operation. No one knows unless they have had the misfortune I have had to operate on certain cases two or more times how difficult it is at times to remove the kidney. In doing ordinary operative surgical work on the kidney and in cases of primary nephrectomy we do not have the mass of adhesions to deal with that we do when we attempt some of these cases of secondary nephrectomy. The adhesions going upward toward the suprarenal capsule and those descending along the ureter are sometimes from two to three inches in width and an inch in thickness. It is almost impossible to dissect away the adhesions of this kind and we very often have to clamp, dissect and ligate again as in the case I spoke of to-night. The pedicle is often very wide, the vessels are all held together by adhesions, perhaps not in a small mass, but over a wide area. There-

fore it is hard to ligate the pedicle in such a case. Very often when you try to push a clamp or needle through this mass of spread out pedicle you will injure one of the veins, and also in freeing the adhesions you are liable to cause a hemorrhage.

In regard to the incision and the position of the patient, recently I have been operating on cases, putting a sand bag under the opposite loin, having the patient on his side, and having under the neck a log or sand bag of about similar size, between three and five inches in height, and having the shoulder of the side on which I remove the kidney a little more turned backward than the other one. In that way we have the erector spinæ muscle almost on a level and if we have made a free incision from the anterior superior spine to the twelfth rib and have retracted the abdominal wall we can have a better view of the pedicle than by any other position that I know of. The incision that Dr. Bolton spoke of—the transverse incision parallel to the lower rib—is without doubt one which gives us a good view of the kidney and a good approach. Personally, however, I am in the habit of making an incision from just above the anterior superior spine of the ilium curved up to the twelfth rib. I find from an incision of this kind that I have a very good control of my kidney, and that I can work as well, if not better, than by having the incision parallel to the lower rib.

DR. MANLEY.—This subject is one which I am very much interested in because in the last few years I have seen quite a few of them. I am fond of asking questions, Mr. President; it is a weakness of mine in societies, but I would like to ask Dr. Johnson as to what proportion of females he had in this number of cases of pyelonephrosis as I do not recall, Mr. President, ever having seen a single case in the male.

As to the mode of procedure, the radical operation, the statistics of the American surgeons are decidedly against this, and all the foreign writers, with the probable exception of Israel, in regard to the mortality from the simple incision and drainage and the removal of the kidney—nephrectomy. The question might be asked, Mr. President, as to whether nephrectomy is an operation which is warranted at all unless the kidney is practically totally destroyed. One might say if there are local areas of pus scattered through the kidney substance or parenchyma that it is pretty sure to involve systemic poisoning and ultimately lead to serious results; but that has not been my experience. I have seen quite a number of cases where there was a pretty well marked enlargement over the lumbar region of the abdomen, where there was pus thrown out in considerable quantities at the urethra, with all the histological characteristics of renal, that is, there were the pelvic and the renal epithelia, where patients had made very good recoveries. This process appears to be practically identical with that which we often observe in pyosalpynx, where the pus opens and drains off through the arteries (*sic*). In a case where the kidney is extensively destroyed and nothing remains but a shell, in that class of course the removal of the remains is from a theoretical standpoint the only procedure; but in those instances which have come under my observation of that class, all of them were in a very exhausted state, in very bad shape for the operation of nephrectomy—just that class which Dr. Johnson classes as that which will not warrant an extensive operative procedure. The operation, from what I have seen myself, what I have done myself, what I have seen in the hands of experienced surgeons, has been attended with a pretty large mortality, and hence in my opinion even though a fistula should be left, unless the patient's condition is such as to warrant so severe an

operation, it is a question whether or not we should do the tentative rather than the operative procedure. It is said fistula was left after nephrotomy, but I can recall to mind quite a few cases where nephrectomies have been done where the fistula has remained, even after the kidney had been removed.

DISCUSSION CLOSED BY DR. JOHNSON.

DR. JOHNSON.—I am unable to accurately answer the question in regard to the sex of these patients, but I may say that a certain proportion of them were men and a certain other proportion were women.

Selections.

GENITO-URINARY DISEASES.

Removal of Two Hundred and Eighty Grains of White Wax from the Male Urinary Bladder.—DR. ORVILLE HORWITZ. (Proceedings of the Phil. County Med. Soc., 1900).

G. L., twenty-five years of age, was admitted to the wards of the Jefferson Hospital during last September. He complained of a frequent desire to urinate, followed by hemorrhage at the termination of the act. Pain, referred to the neck of the bladder and to the meatus of the penis, was experienced at the end of micturition. He stated that, twenty-four hours previous to his admission he indulged in sexual intercourse and, in order to prevent his mistress from becoming impregnated, he inserted into the urethra a roll of white wax, eight inches long and about twenty-six millimeters in circumference. This was passed into the urethra until its end was just within the meatus. Almost immediately after intercourse had begun, he felt the wax bougie slip into the bladder, the sensation was associated with a good deal of pain. On completing the act he discovered blood oozing from the meatus and felt a burning, stinging pain in the vicinity of the neck of the bladder. The introduction of a stone searcher readily detected the foreign body. Suprapubic cystotomy was performed, and, on opening the bladder, it was found that the wax had become rolled up in the shape of a large ball. On attempting to deliver it by means of the lithotritic forceps, the blades of the instrument became buried in the soft mass and when traction was made the wax was pulled out in a long thin strip, which could be stretched several inches beyond the abdominal incision. In order to remove the mass, it became necessary to insert into the bladder the index fingers of both the right and left hand, to grasp the mass and mold it into the shape of a sausage. By this means it was brought to the outer edge of the abdominal incision, where it was grasped by hemostatic forceps and held until it was caught at a point below by means of a second pair of forceps, thus gradually, hand-over-hand, it was finally removed. It was deemed fortunate that the suprapubic route was chosen in preference to the perineal, for, had the latter operation been selected, it would have been impossible to have removed the wax, and the bladder would probably have been a good deal damaged by the attempt. The wax had to be grasped with the forceps while in sight, the touch being deceptive, the soft wax feeling exactly like the wall of the bladder. Many strange foreign bodies have been removed from the bladder, but, so far as I know, the history of this case is unique.

Therapeutic Reports

CICATRICAL STRICTURE.

By M. A. AUERBACH, Ph.G. M.D.

Relative to the results obtained as reported by a California physician in stricture by injections of Glyco-Thymoline. Since that time I have treated nine cases of stricture, and watched them from time to time with the urethroscope and have come to the conclusion that Glyco-Thymoline does not cause absorption of scar tissue as was at first supposed, but of the reorganization of the same. The writer could notice upon the frequent urethroscopic examinations made in succession upon same individual the increased vascularity of the mucous membrane immediately surrounding the cicatrix. The funnel-shaped cicatrix, after a very short time, took on a rosy healthy color and from the funnel shape, became tubular, the natural form of the urethra.

The injections varied from 50 per cent. to 75 per cent. in strength; only the first injections causing any discomfort. My longest case took about two weeks and half.

Case No. 1.—Mr. J. E., age 22, Water street. Had great difficulty in passing water. It took him usually three times as long to urinate as his companions, and it passed from him in a forked stream. An examination revealed a stricture of the posterior urethra, through which a No. 14 Fr. sound would not pass. After five days of injections (Glyco-Thymoline), 50 per cent. solution, a No. 18 Fr. could be

easily passed. The strength of the injections was increased to 75 per cent. and kept at this strength until a cure was effected. After 16 days of treatment a No. 30 Fr. sound could be easily passed causing no pain.

Case No. 2.—Mr. B. L., Forsyth street, called upon me with all the symptoms of a case of stricture. Examinations showed a stricture of the middle urethra and another of the anterior urethra. Patient was at once put upon a 50 per cent. solution of Glyco-Thymoline (Kress) injected twice daily. In nine days a No. 28 Fr. sound could be passed without using force, and patient was then discharged as cured, No. 28 Fr. being the normal size of this urethra.

Case No. 3.—Mr. H. M., Allen street, on urinating the water only dribbled from him, causing him to take from fifteen to twenty minutes to empty his bladder. It was with great difficulty that even a filliform catheter was passed. The stricture was situated about in the middle third of the pendulous urethra. Injections of a 75 per cent. solution of Glyco-Thymoline (Kress) was forced into the strictured urethra twice daily with the gratifying result that after five days of the above treatment a No. 14 Fr. sound could be passed. After two weeks of the above treatment my patient took a No. 30 Fr. sound without pain.

Case No. 4.—Mr. D. R. L., complete occlusion of the urethra with retension of urine. Was called 2 A.M. to see patient and relieve condition. I found

it a very difficult task to even introduce a filliform catheter past the stricture for such it was, but after considerable teasing was at last enabled to draw of the urine and relieve the pain. I had the gentleman call upon me early the next day for treatment at my office, which consisted of 50 per cent. injections of Glyco-Thymoline (Kress) thrice daily. This treatment was kept up for twenty consecutive days, after which period a No. 30 Fr. sound was passed with ease.

Case No. 5.—Mr. M. B., 125th street, passed a very small and irregularly shaped stream of urine which caused considerable discomfort. The urethra was so tender that it became necessary to anesthetize it with "Nirvanin" before a sound could be introduced to ascertain the position of the stricture which proved to be in the posterior portion. Glyco-Thymoline (Kress) in 50 per cent. strength was injected twice daily until a cure was made, the same taking twelve days.

Case No. 6.—Mr. R. DeL. gave a history of three attacks of gonorrhea, the last one followed by a stricture for which he came to me seeking relief. The stricture was situated in the anterior portion of the urethra and was easily reached with a glass syringe. Injections of a 50 per cent. solution of Glyco-Thymoline (Kress) were instituted twice daily, resulting in a perfect cure after fourteen days.

Case No. 7.—Mr. Martin K., Lexington avenue, came to consult with me for, as he explained it, an unexplainable condition of his bladder. Upon close questioning I elicited the facts in the case, which are as follows: Six months ago patient had an attack of gonorrhea, which he cured himself with one of the popular injections. The discharge stopped after two months' continuous use of the injection, and he also noticed that the volume of his stream of urine was not alone diminished, but that it required more time to pass it and also more force. A No. 18 Fr. sound was passed with considerable pain and great difficulty. A solution containing 50 per cent. of Glyco-Thymoline (Kress) was injected twice daily. After ten days a No. 28 Fr. sound was easily passed, and after 14 days a No. 30 Fr. was easily taken.

The remaining two cases being so similar to the preceding ones it will hardly be necessary to burden you with them.

In conclusion, however, I would like to make mention of a case of stenosis of the os uteri, which I have under my care and which has been greatly benefited by eight applications (tampons of Glyco-Thymoline (Kress)). The stenosis is gradually growing less and the tissues of the os are becoming less rigid.

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Original Communications.

REMARKS UPON THE MICROBACILLUS OF SEBORRHEA (SABOURAUD)—PRELIMINARY REPORT UPON AN EXAMINATION OF THE SEBACEOUS GLANDS OF THE NOSE.

BY JAY F. SCHAMBERG, A.B., M.D.,

Professor of Diseases of the Skin in the Philadelphia Polyclinic and College for
Graduates in Medicine.

IN 1894, Unna, Engman and Hodara described a minute bacillus which they found constantly in comedones, and which was regarded by them as the cause of blackheads and of acne. In a histologic and bacteriologic description of comedones, they state that in the external layers of the comedo are found micrococci and the bacillus asciformis (flaschen bacillus), and that in the center myriads of microbacilli swarm. Unna, in his "Histopathology of the Skin" (page 350), says: "In the interior we find a special form of bacillus. We are particularly interested in the latter, inasmuch as it is, with the greatest probability, not only uniformly associated, but the true cause of the comedo formation and consequently of acne. The strongest proof of its etiologic significance, as far as histology goes, is in its relationship to suppuration of the comedo. The secondary and unessential pus formation in acne is not caused by an accidental contamination with pus cocci, but through the organism whose constant presence in the base of the comedo stamps it as its probable cause."

Microbacilli in the Sebaceous Glands of the Nose.

About a year ago, while examining the sebum from the sebaceous

follicles of the nose, I noticed an organism therein which was apparently identical with that described by Unna and his confrères. On looking up the subject I found that Sabouraud had previously noted its presence in the follicles of this region, and had remarked upon the identity of this organism with that of Unna. In order to determine its frequency, I examined fifty subjects, some perfectly healthy individuals and others suffering from various cutaneous diseases, presenting themselves at the Polyclinic Hospital. A little sebum was squeezed out from the nasal follicles, spread between two cover-glasses and stained with Loeffler's methylene blue and gentian violet. The condition of the skin of the nose, whether oily or dry, was noted in each instance. The results are herewith subjoined: Bacilli were present in 45 cases and absent in 5; they were present, therefore, in 90 per cent. of the patients examined:

27	positive cases, skin oily.
16	" " " dry.
2	" " not determined.

—

45	
3	negative cases, skin dry.
2	" " " oily.

—

5

In the negative cases there was some difficulty in getting a sufficient amount of sebaceous material. No re-examinations were made.

The bacilli were present in masses of thousands, and represented practically pure cultures. They varied from $1\frac{1}{4}$ to $1\frac{1}{2}$ m. in length and $\frac{1}{3}$ to $\frac{1}{2}$ m. in width; they were easily stained with aniline dyes, but were decolorized by acids.

Stained with Loeffler's methylene blue or thionin, they were very minute. They were about one-third larger when colored with gentian violet, owing to the staining of the surrounding capsule. They were not decolorized by Gram's method.

Efforts to artificially cultivate this bacillus failed. After trying all the ordinary media, I employed sterilized butter, and a combination containing chloride of sodium, phosphate of sodium, lanolin, etc., to approximate the constitution of human sebum, but without success.

Microbacillus of Seborrhea.

Sabouraud has made a most elaborate study of this bacillus, which

he designates as the "microbacillus of seborrhea." He has succeeded in growing it upon a special medium, after fifteen months of experimentation. In regard to seborrhea, he says: "The primary lesion of seborrhea is characteristic; it is the fatty cylinder in each pilary orifice, which pressure forces out. The seborrheic flux, in any given region, is the consequence of the elementary lesion just described, when it exists in myriads." This "seborrheic vermiform filament" is the forerunner of the comedo. Examined under the microscope, this filament contains

FIG. I.

Microbacillus found in follicles of the nose. (Sabouraud's microbacillus of seborrhea. Bacillus of acne, Unna, Engman, Hodara.) Bacilli and capsule stained with gentian violet.

millions of microbacilli. "It is, at the same time, the purest and the most abundant cutaneous infection known."

Comedo and Acne.

Sabouraud likewise regards this organism as an accessory, and, even at times, the exciting cause of acne.

"In all forms of acne, the seborrheic microbacillary filament is, in point of time, the first lesion. For there is no acne without pre-existing seborrhea."

In order for seborrhea to become acne, in order that the elementary

lesion of seborrhea may become that of polymorphous acne, a transformation is necessary, the cystic transformation which makes of the seborrheic filament a comedo."

The formation of the acne papule and pustule is due to secondary infection with staphylococci. Suppuration may, however, result at times without such secondary infection. "One is thus persuaded to ask whether, in some cases, acne suppuration is not purely microbacillary."

Baldness.

For Sabouraud, baldness is also due to this microbacillus, although he recognizes predisposing causes. He says:

"I have never seen grave baldness develop in a subject in whom the urologic curve was normal." (The typical urologic curve of baldness, according to Sabouraud, shows hyperacidity, hyperchloruria, and hypophosphaturia, the last named condition being the most constant.) "But I have never seen either a baldness which was not microbic, and which did not present the same microbe, an only microbe, always present in the follicle from which the hair falls."

"True baldness is seborrheic. Finding the microbe of seborrhea on the scalp of all bald persons proves bacteriologically the identity of oily seborrhea in all of the regions that it may occupy."

Microbacillus of the Peladic Utricle.

Several years ago Sabouraud wrote in the following manner concerning the bacillus which he found in alopecia areata:

"Moreover, there rests against the pathogenic rôle of this microbe a sufficiently strong objection to arrest a conviction, until certain proofs are established, which I cannot yet bring to bear. There is a known microbe in a common human affection, which I have not been able, either by its form, proportions, or methods of staining, to differentiate with certainty from the microbe of the peladic utricle; it is the microbe discovered by Unna, Engman and Hodara in the comedo of acne. I have a thousand times verified after them the existence of this in the comedo. The fact is indisputable. I have sought to differentiate by every means this microbe from the microbacillus of the peladic utricle. Their differences, without being negligible, are scarcely sufficient to permit me to affirm their duality." Sabouraud then details the following differences: The microbacillus of the peladic utricle appears to him to be a little smaller in all of its proportions, less regular in form, and often curved in the form of a comma or in a sigmoid manner.

Lustgarten's stain for the syphilis bacillus colors the comedo bacillus but not the peladic microbe. Sabouraud hastens to add that this differentiation can scarcely be relied upon, as decolorization, or the retention of color, depends upon the duration of immersion in the sulphurous solution.

To the unbiased reader and observer, it is evident that the microbacillus described by Unna, Engman and Hodara, and the peladic microbacillus described by Sabouraud, are one and the same organism. Their anatomical situation in the utricle or dilated summit of the hair follicles is identical both in the alopecia areata and in ordinary baldness. This can be verified by reference to Sabouraud's lithographic plates illustrating his articles on alopecia areata (*Annales de Derm.*, etc., Tome VII.), and his illustrations of the anatomy of "Calvitie" or baldness (*Les Maladies Seborrhéiques*, 1901). Furthermore, there are no reliable means of differentiating morphologically or tinctorially the microbacillus of seborrhea from that of alopecia areata. It is evident from a perusal of Sabouraud's articles that he regards the microbacillus under consideration as the cause of seborrhea, the cause of ordinary baldness, an essential accessory cause of acne, and occasionally the exciting cause of the last named disease. It is furthermore obvious that the "microbacillus of the peladic utricle," which Sabouraud described as the cause of alopecia areata, is, beyond reasonable doubt, the same organism as that which he alleges to produce ordinary alopecia. Seborrhea, acne, ordinary baldness and alopecia areata are, therefore, according to Sabouraud, produced by the same germ. What is it that causes the germ to produce one affection in one individual and another disease in another? Why should alopecia areata occur in one patient, and progressive baldness in another? Why should young women suffer from acne, and not from baldness? It would seem the easiest matter in the world for the microbacilli to be transplanted from the face to the scalp. I presume the answer is that the soil determines whether the germ shall grow, flourish and produce its pathogenic results in one region or another. I am of the opinion that the microbacillus described by Unna and Sabouraud may be found in the sebaceous follicles of the nose, and perhaps elsewhere, in 90 per cent. or more of adults. Sabouraud would doubtless reply that almost every one suffers from seborrhea of the nose. If the presence of vermiform sebaceous filaments in the skin constitute seborrhea, then this statement is true. It may be well, however, to call attention to the fact that in sixteen of the individuals in whom I found microbacilli the skin of the nose at the time of examination was dry and not oily. Heretofore, dermatologists have recognized two

forms of seborrhea, *seborrhea oleosa* and *seborrhea sicca*. Sabouraud denies the existence of the latter condition.

If microbacilli are present in millions in the sebaceous glands of the nose in nearly all adults, it is not surprising that they should constantly be found in comedones, and frequently in the hair follicles of the scalp. Sabouraud first found them in alopecia areata, and more recently in ordinary baldness. It will be interesting to determine whether they cannot be found in other conditions.

Are all individuals in whom microbacilli are found protected against acne, baldness and alopecia areata by reason of the fact that they present an unfavorable soil for the growth and development of this bacillus? If this were true, it would indicate that only a very small percentage of the carriers or hosts of this organism were susceptible to its ravages. Moreover, the vast majority of people, in addition to this minute bacillus, have staphylococci present upon the skin. They have, therefore, both of the germs which determine an acne. If they are protected by the absence of favorable soil, then the general predisposing causes of acne are of preponderating importance and the presence of the exciting organisms of secondary significance.

In the sebaceous follicles of my own nose, and in those of various members of my family, I have repeatedly found myriads of microbacilli. I believe most physicians will be able to verify this observation in their own households.

Sabouraud explains the origin of microbacillary infection in the following manner: By chance contact, such, for instance, as might occur in kissing, the bacillus passes from one individual to another. It may or may not find a favorable soil ("*terrain propice*"). If it does find it, it multiplies in the sweat, and the sebum is exuded upon the surface of the skin. It multiplies until it reaches the orifice of a follicle in which its generations can live.

"The microbacillary infection once established in the follicle, is invariably accompanied by three symptoms: the seborrheic flux, the falling of the hair in the infected follicle, and the hypersecretion of the sweat-glands in its neighborhood." One must admire the industry and the close powers of observation which have enabled Sabouraud to elaborate the fascinating theory which he presents in his recent most interesting work, "*Les Maladies Seborrhéiques*." It appears to me, however, that the evidence presented as to the parasitic nature of seborrhea, acne and baldness, is by no means conclusive. It has not been definitely proven that the microbacillus described by Unna and Sabouraud is not a more or less normal resident of large sebaceous glands.

RELATIVE IMPOTENCY DUE TO CHRONIC URETHRITIS
OF THE POSTERIOR URETHRA.

BY LOUIS E. SCHMIDT, M.Sc., M.D.,
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IT has been repeatedly stated, and it is a fact, that impotency is often caused by chronic urethritis. This frequent assertion, however, rarely takes into consideration the individual causative conditions, and the different varieties of this disease which may occur.

It is desirable to draw attention to a special type of chronic urethritis of the posterior urethra, which causes a peculiar kind of passing (non-permanent) or relative impotency. We find individuals who, after having observed themselves closely for some time, find that the ability to have repeated intercourse within a short period of time is greatly increased, others again that the sexual feelings have become much more marked.

In both of these types we find the coincidence that the changes in the sexual powers and sensations soon follow in a slight varying period of time the acquisition of a gonorrhea.

In the first group of cases we see, at least for a short time, complete impotency, which is followed in the course of time by greatly reduced sexual powers.

The second group gives symptoms which are most peculiar. After a period of reaction in these individuals, during which normal erections occur, we find that the sexual feeling is changed into a most painful condition, in which the ejaculation is but an occurrence, and which is accompanied with severely painful sensations. These particular individuals avoid and fear every opportunity of sexual excitement and fear much more the sexual act. Partly due to local causes, partly due to the psychical impressions, we find that the erections become very few and that in case of sexual congress the act remains incomplete. In such affected individuals frequently phenomena arise. We find that during long-continued intercourse no ejaculation whatsoever occurs, even if slight sexual sensations are noticeable.

Impotency, when not due to atrophy of the seminal apparatus, is usually caused by pathological changes in the prostate gland. In this variety of impotency there is marked condition differing from those caused by any prostatic changes. In those cases of impotency produced

by prostatic pathological conditions, we find it characteristic that ejaculations are incomplete and insufficient.

The local findings are characteristic in the types to which we have reference.

In the first mentioned cases the caput gallinaginis is apparently enlarged, rounded out, the mucous membrane of a bluish-red color, the prostatic sinus greatly injected. In cases of the second type, the inflammatory signs are still more prominent. The adjoining part of the veru montanum also shows signs of inflammation. The usual slit-like openings of the ejaculatory ducts, which are upon or within the margin of the sinus pocularis, show a peculiar rounded and prominent form, still easily recognizable, yet the surrounding affected mucous membrane causes their apparent displacement.

The therapy can be successful only, and experience shows this to be true when the area affected is treated directly under control of the eye; in other words, when the treatment is undertaken with the aid of the urethroscope. It is of paramount importance, previous to the commencement of treatment, to be positive whether we are dealing with an acute inflammation or whether the chronic condition has set in. In the former case, the treatment must be more of a general character, that is, depletory and antiphlogistic. In the latter type we can immediately commence with the urethroscopic treatment.

It is well understood that the posterior urethra is sensitive to instrumentation, and, as we may easily imagine, especially so when we introduce straight and large caliber instruments. For this reason it often desirable, and in some cases imperative, to use a local anesthetic. This can be done in two ways; we either introduce into the rectum, ten minutes previous to the urethroscopy, a quarter-grain morphine suppository, or, if the patient is especially sensitive, instillate into the posterior urethra five to ten minims of a two-per-cent. cocaine solution with a Guyon capillary catheter and syringe. In order to insure complete anesthesia of the parts, it is necessary, in a limited number of cases, to free the mucous membrane of the posterior urethra from the secretions, which often times cling tenaciously to these parts. This is best done with the aid of a soft rubber catheter and large syringe, with which we irrigate the parts thoroughly. Then we make the application of the local anesthetic. The treatment consists of the direct application to the caput gallinaginis and adjoining parts of iodine-glycerin solution. The treatments are first made with weak solutions, and then slowly increased in strength. The weak solution can be used freely, and the parts thoroughly "touched up" daily. As we reach the strong solution, we use less in quantity and make less frequent applications;

sometimes it is necessary to allow seven to ten days to intervene when using the strong iodine-glycerin solution. The interval varies according to the reaction. During the entire period of treatment the patient must be impressed with the importance of complete avoidance of sexual excitement, certainly of all attempts at the sexual act.

After the disappearance of the inflammatory swelling, provided no complication is present, we may expect complete return of the sexual function and sensations.

NEW TISSUE FORMATION IN THE URETHRA, ITS EARLY DETECTION AND PERMANENT OBLITERATION.*

BY J. HENRY DOWD, M.D.,
Buffalo, N. Y.

EVEN at this late date it is an open question as to whether new tissue (the first step towards stricture formation), and especially after it reaches a certain stage, can be completely and permanently eradicated. Fully 98 per cent. of all new tissue formation in the urethra is due to gonorrheal inflammation, which, if a little care is exercised, is detectable before firm cicatrices develop, and even after such has occurred it is possible to cause their entire disappearance.

Taking a case of acute inflammation, from its incipency, we find the following:

Acute inflammation of the whole membrane, as far as the sub-mucous tissue.

This runs a course more or less prolonged, ending in about six or eight weeks, either in complete resolution, or a chronicity develops, varying in degree from involvement of the whole membrane to only localized spots, the remaining membrane being in an almost normal condition.

Even though the former seems to persist, if irritation is avoided (this being the great cause of continued chronic urethritis), and the case left to Nature alone, sooner or later the membrane will assume a normal condition except at certain spots, these being situated at the most vascular and dependent portions of the canal, or where injury may have been done by our treatment with instruments, etc. One other factor is important as a causative agent: internally we find the

* Presented at the Pathological Section of the Buffalo Academy of Medicine, January, 1902.

circular muscles, whose function, together with the longitudinal layer, completely empty the urethra of every drop of urine. When inflammation has existed long enough to produce a marked cellular proliferation, the infiltrated muscles lose, to a certain extent, their contractility and the last few drops of urine, owing to a lack of propulsive force, adhere at the point of diminished power, *i.e.*, where the chronic inflammatory area exists.

Unless appropriate treatment is now instituted to bring about resolution in these spots, it will be found in time they will pass through the following course:

Cellular infiltration.

Cell proliferation.

New tissue formation, resulting in cicatricial tissue or stricture.

It is the detection of these chronic inflammatory areas with the promotion of absorption that prevents the last-named result.

As resolution ensues from the acute condition, it is seen that after discharge has ceased for several days, if the urine is examined visually, it will be found to be clear or nearly so, but floating there will be seen stringy substance, which, if examined microscopically, is found to consist almost entirely of pus cells and is virtually what has been seen at the meatus, but now, owing to the weakened inflammatory action, pus is not produced in sufficient quantities to appear except by forcibly washing it out. How different the appearance, both visually and microscopically, when this débris is seen some three or four months' later. In the glass they (one or several) appear like pieces of white thread, and microscopically they are found to be composed of degenerated epithelial cells, pus cells, possibly a few cocci, all held firmly together in a mucus matrix, and being a positive indication of localized inflammatory action with new tissue formation.

The same condition may be present twelve to eighteen months after infection, and the canal reduced in caliber one to three numbers, yet detection by the bulb will not be evidenced sufficiently to say stricture exists except by finding the bloody string, soon to be described. Bloody, string-like clots must not be confounded with the true bloody shred or shreds, for with the former they may appear, following dilation of a healthy canal, where small meatus exists or injury has been done the membrane.

Visually, the first-named appear as blood, being string-like in appearance and consisting entirely of blood-cells, being held together in a hyaline matrix. On the other hand, the second, *i.e.*, those indicating new tissue formation, look like the true shred, but bloody in appearance, and if examined carefully are found to consist of exactly

the same material as the true shred, viz., pus, mucus, degenerated epithelium, with the addition of cells all held firmly together in a hyaline matrix. In a pathological contraction in the urethra the membrane behind contraction is not only dilated but chronically inflamed, and it is from this portion of the canal that we find the shred has its origin. These are not always formed longitudinally, as might be supposed, knowing that when at rest the canal is a closed tube, the membrane lying in folds, but, on the other hand, they may be and are often formed parallel to the circular muscles, lying in close proximity to the cicatricial contraction, which always encircles the canal. Although the major portion of the inflammatory exudate may be washed out by the urine and pre-instrumental flushing, soaking, so to speak, is necessary for its complete removal. As the instrument passes from before backward it is evident that the constriction will follow the same direction, but only to a certain degree, on account of its firm attachment to the surrounding tissues.

It is known that normal muscular tissue will stand dilation to a certain degree without laceration, but with chronically inflamed and infiltrated tissue the opposite occurs the moment stretching takes place above the caliber that exists. The blood and serum may exude either as the instrument passes in or is withdrawn, but one thing is positive, a certain amount, either by exudation from the newly-formed tissue or constricted apex, lands over the inflammatory area, where it infiltrates into the adherent debris, detaching the same and being washed out by the post-instrumental flushing. As the dilations are continued, the string or strings will become smaller in size, until they, with the true string, will entirely disappear. In using this procedure either for diagnosis or prognosis the fact must not be forgotten that, for the first, an instrument must be used of sufficient caliber to cause stretching of the constriction over that already existing, and, secondly, to be sure all new tissue has been absorbed, sounds must be used of a caliber that will stretch the circular muscles at least two numbers French over that which they normally assume.

As a positive evidence of the absorption of all new tissue formation, the following rule will hold good:

Dilation two sizes above the normal circular muscular caliber, at intervals of a week, for at least eight times, with absence of the bloody string at each séance.

With a rest of about two months, repeat the dilation, examining carefully for the bloody string. If not found, allow an interval of at least six months to elapse, when repeat the procedure as before; if none now appears, the same may be repeated once in six or eight

months for three or four times, when, if there is no reappearance, all new tissues may be said to have been completely and permanently absorbed.

In case where strictures are cut, the same general rule holds good.

Conclusions.

The stringy substance found in the urine during the early period of resolution (three to eight weeks) must not be confounded with the true shreds (three months and on), which are evidence of localized inflammation.

The bloody, clot-like string so often seen after dilation of the urethra, and due to contracted meatus, close navicular valve and the like, must not be confounded with the true bloody string, which consists of pus, degenerated epithelium, mucus and blood-cells imbedded in a hyaline matrix.

An antiseptic solution should always be used for flushing the canal previous to instrumentation, and following this an astringent should be used in the same way, this not only for allaying irritation but flushing out the evidences of new tissue formation.

For diagnostic purposes, the constriction must be stretched above that that already exists, and for prognosis at least two numbers above the normal circular caliber.

378 Franklin Street.

A CASE OF INITIAL LESION OF SYPHILIS AT THE HEEL.

BY A. T. BÜCHLER, M.D.,
New York.

THOUGH the initial lesion of syphilis has been observed in almost every conceivable region of the surface of the human body, yet the case here reported, with its localization at the heel, is, as far as my reading goes, unique. The history of the case is, in brief, as follows:

On September 13th, 1901, W. L., a well-nourished female child, aged seventeen months, was brought to the Skin Clinic of the Dispensary of the Presbyterian Hospital for treatment of an obstinate lichen tropicus eruption, with which the child had been afflicted throughout almost the entire summer. The papules were scattered over the thorax, abdomen, and extremities, many of the lesions bearing on their apices excoriations from scratching. In addition to this very annoying

affection, there was present an oval lesion, extending transversely across the region of the right tendo Achillis, just above the heel. This lesion was distinctly elevated, well circumscribed, of considerable induration, and of dusky-brown color.

It presented a cup-shaped, central depression, covered by a yellowish-brown crust, the removal of which revealed a reddish, granular surface.

Its longer diameter measured about an inch; its shorter was about half that length.

The inguinal glands of the corresponding side of the body were considerably enlarged. Aside from the above-mentioned lichen tropicus eruption, the skin was absolutely normal, as were the mucous membranes, and, excepting the primary adenopathy, the lymphatic glands were not enlarged.

On inquiry, it was ascertained that the patient was an only child, that she was perfectly healthy, at birth and since that time; that she had never been troubled with snuffles, and that she was entirely free from hereditary stigmata, a statement which was confirmed by examination. In regard to the lesion at the heel, this, it was stated, first appeared about two months ago as an elevation of the size of a small bean, and gradually increased until it reached its present dimensions. Concerning the mother, it was learned that she had never miscarried, that there was no history of genital lesions, but that for the last four months she had been the bearer of an eruption.

This, on examination, proved to be a papular syphilide at the hairy border of the forehead, of the abdomen, and thorax, in the stage of involution. Moreover, there were found large, fungating, offensive condylomata lata of the inguinal fold and inner surface of each thigh. There was a general adenopathy. The mucous membranes presented no changes. No traces of an initial lesion could be detected.

Reverting to the history of the child, her condition remained unchanged until September 30th, when she presented a well-marked papular eruption of the palms, a papulo-pustular syphilide of the forehead, and enlargement of the anterior and posterior cervical, as well as of the epitrochlear glands.

The subsequent history is of no particular interest; suffice it to say that during the next two months the child was affected with condylomata lata around the arms, the vulva and thighs, and with repeated outbreaks of mucous patches of the lips and of each angle of the mouth, which eventually responded to treatment, as did the initial lesion, which, at the time of writing (February 10th), is now indicated by a pigmented area of brownish color, with some infiltration. Granted

that the data furnished by the mother as to the acquisition of her own syphilis, and as to the course of the latter, are incomplete, yet the absence of all stigmata in the child, when first seen, together with the appearance of the lesion, so typical of the hard chancre, preclude the acceptance of hereditary transmission.

As it was customary for mother and child to sleep in the same bed, circumstantial evidence would point to the condylomata lata of the mother as the probable source of infection of the child, an excoriated lichen tropicus papule presumably serving as port of entry for the syphilitic germ.

Book Reviews.

Les Maladies Séborrhéiques. R. SABOURAUD. Paris: Masson et Cie., 120 Boul. St. Germain, 1901.

Sabouraud's work, which in its scattered form has become familiar and has excited not a little admiration, has, with the exception of the ringworm and impetigo essays, been collected with additions in this volume. It includes seborrhea (eczema seborrhoicum), acne and alopecia. All this vast group he holds is due to the activity of his microbacillus, alone or contaminated by other pyogenic organisms. His seborrhea includes everything, even the lichen annularis of his countrymen (certainly not the ringed lichen of other schools), as far as psoriasis; his acne, not only the ordinary variety but rosacea, acne keloid and acne necrotica; alopecia, the seborrheic sort and alopecia areata. There can be no reasonable question of his findings, but his interpretation of them needs toning down. Clinically, it is a matter of common knowledge that the scalp needs attention in all these disorders and bacteriologically it need excite no wonder that one organism is capable of causing such diversified ills when we remember that the blastomyces causes pus and tubercle formation and the streptococcus erysipelas, impetigo and furuncle. Moreover, it cannot be expected that complete proof in the form of production of all the lesions be adduced since no man can predicate the clinical type of any tuberculosis. At the same time why is it that this work cannot be duplicated in other lands? Why do not the brick red cultures appear in Scotland and America? Why does the organism remain quiet in certain sebaceous glands and not in others in one subject? It is not by any means to be found in every comedo. So far as is to be seen there is no effort to distinguish it from Welch's staphylococcus epidermidis albus, which is the most universal of skin flora. Unna's morococcus, very likely identical with Welch's organism, is cynically dismissed as "*légendaire*"; Malassez's is not mentioned at all. Sabouraud apparently does not know that Robinson long ago produced a patchy alopecia by injection of staphylococcus cultures. Until these and other points cease to be ignored, this verdict must remain "not proven." It may be that degrees of virulence alone are necessary to determine a pityriasis, an edema, or pus formation. If so, the demonstrations would be vastly interesting.

Sabouraud has undertaken to define seborrhea as a sebum flux, its etymological meaning, wherein he leaves a door wide to confusion. It is evidenced clinically by the greasy plug, filled with microbacilli which can be expressed from the follicular openings, a thing usually regarded as a normal condition, at least about the nose.

In their beginnings, at least, keloid acne and rosacea are not acneiform; "seborrheic" or semile wart is never microbic at any stage. As a corollary to the last proposition, since the verruca senilis is often precancerous, the microbacillus may be held to be potentially a cause of cancer. This seems a very general outcome to special lines of investigation, a too widespread generalization. The monograph is an interesting human document.

J. C. J.

A System of Physiologic Therapeutics. Edited by SOLOMON SOLIS COHEN, M.D. Philadelphia; P. Blakiston's Son & Co., 1901. Vols. I to IV inclusive.

In opening this review, it is proper to say that circumstances over which the editors had no control have delayed its appearance and perhaps, in consequence, are responsible for to bring a noteworthy work to the attention of the JOURNAL's readers. It is quite unique both in scope and character in American literature and is therefore really needed. The volumes present a most attractive appearance, the page is beautiful and illustration in color and black all that could be asked for. The contributors are well known for their labors in the fields the system is to cover and are not confined to America. Europe is drawn upon largely. The editorship could not have fallen into better hands, it is hardly necessary to remark. Dr. Solis Cohen may be trusted to see that the common faults of systems, overlapping and diametrically opposed contentions do not occur.

Vols. I. and II., edited by J. W. Jacoby of this city, are given up to Electrotherapy, the first volume containing the subjects, physics and apparatus, the second, methods and special application. Under the latter head there is an article by Ohmann-Dumesnil on electrotherapy of the skin which is admirable. Illustration is profuse. Of course, X-rays figure largely, but Finsen's method goes over to a later publication. Is it to be supposed that the editor regards electrotherapy as the first of the "methods other than drug-giving" that he presents it first?

Climatology fills the next pair and is considered by Parkes Weber of London, so there can be no suspicion of exploitation. It is claimed to be the first systematic treatise on the subject, and certainly it is in the sense that it is the most thorough. Limitations as well as qualifications are given to the end that the old happy-go-lucky fashion of sending a patient hither and yon may be replaced by definite notions of a place suited to his pocket and his individuality as well as his disease.

The publishers deserve every encouragement in their great enterprise. There are to be eleven volumes in all and the price of the set, which has been raised, is even now only \$27.50.

Society Transactions.

FRENCH SOCIETY OF GENITO-URINARY SURGERY.

FIFTH SESSION.

(*Annales des Mal. d. Org. Génito-Urin.*, 1901, p. 1327.)

(Continuation.)

Movable Kidney, Pathogenesis and Indications for Operation.—Dr. E. CHEVALIER.

II. INDICATIONS FOR OPERATION.

Operations for movable kidney begin with Keppler (1879), but the surgical treatment of this affection begins really with Hahn (1881) who made the first nephrorrhaphy. Nephrectomy, which was done by Keppler, has seemed to become more restricted in its indications in proportion as the auto-plastic operations have come to be practised.

A. OPERATIVE INDICATIONS ACCORDING TO THE FORM OF MOVABLE KIDNEY.—Often without symptoms, movable kidney may, however, make its presence known by three principal classes of symptoms: Pain, neuropathic and dyspeptic disturbances, often associated, but with such predominance of symptoms as to enable a classification under one of these three forms.

Movable kidney is simple when its symptoms are almost exclusively renal, it is then almost solely amenable to operative treatment; it is called complicated when other organs are affected (enteroptosis, splanchnoptosis), and, in this case is not ordinarily operated.

1st. DYSPEPTIC FORM OF MOVABLE KIDNEY.—Digestive disturbances are:

a. *Mechanical* (rare) intestinal obstruction, icterus, biliary lithiasis; and due to the compression exercised by the kidney; operation is here indicated.

b. *Nervous* (very frequent) atonic dyspepsia, dilatation of the stomach, constipation, &c., &c.

c. *Due to enteroptosis*: When this condition presents it would seem as if all surgical procedure should be discarded. There are, however, cases (Bazy) in which the nephroptosis playing an essential rôle in the genesis of this neproptotic cachexia, operation is useful.

In general, however, the operative results of the dyspeptic form are mediocre; before intervention all orthopedic and medical measures should be exhausted, and, moreover, should also be employed after such operation, when this has been resorted to.

2d. NEURASTHENIC FORM OF MOVABLE KIDNEY.—In this form, the worst from an operative standpoint, nephropexy furnishes half the unsuccessful cases.

It may occur in the nervous woman, in whom the genital apparatus should be well investigated in order not to ascribe to the kidney that which appertains to the uterus, or it may occur as well as in the neurasthenic or the hysterical. The rôle of nephroptosis may be important (Potain and Bychowsky, Albarran) and nevertheless be unrecognized.

Nervous disturbances may antedate nephroptosis and be aggravated by it or they may be secondary to and follow nephroptosis. The operative results are as uncertain as in traumatic hysteria; they are sometimes injurious; in spite of the good results sometimes observed (Smith), operation should be resorted to only after orthopedic and medical measures have failed. We should use special circumspection in expressing ourselves as to possible results of operation.

3d. PAINFUL FORM OF MOVABLE KIDNEY.—This is the most satisfactory from an operative standpoint. Varying from simple discomfort to an onset of strangulation of the kidney and intermittent hydronephrosis, the pain is due in large measure to a crisis of retention. Nephropexy in these cases furnishes 80 per cent of cures. We must differentiate this condition from the other causes of neuralgia of the kidney, of the neighboring organs, of the general condition, and recognize the influence of fatigue, walking, repose and of reduction of the kidney.

Even in this form also the most simple means may succeed, massage and above all the orthopedic treatment. All are agreed in advising the latter means and in reserving nephropexy when it has failed. Albarran goes further and gives the patient the choice between nephropexy and wearing an apparatus; as one would for the radical cure of hernia.

Nephropexy is not grave; the mortality has been reduced to 3 per cent. and even to 1 per cent. But is movable kidney a grave condition? Schilling has found it is true albuminuria in 14 per cent; hematuria has been observed, but rarely; movable kidney is grave only from its complications of strangulation or hydronephrosis; the onset, above all the repeated onset, of these symptoms should call for operation. Aside from these indications it seems to the author preferable to operate only when orthopedic measures have failed.

4th. MOVABLE KIDNEY WITH COMPLICATIONS REFERABLE TO THE KIDNEY ITSELF.—Hematuria is cured by nephropexy (Guyon, Newmann, Israel, Albarran, Pasteau).

Tumors, lithiasis, &c., are treated irrespective of a movable kidney. Pyonephrosis in a measure furnishes the same indications as hydronephrosis, and in general lends itself to conservative operations.

B. OPERATIVE INDICATIONS IN HYDRONEPHROSIS WITH MOVABLE KIDNEY.

1st. SURGICAL INTERVENTION IN INTERMITTENT HYDRONEPHROSIS.—Landau (1881) does nephrostomy after four aspirations. Guyon (1889) cures his patients by nephropexy. Terrière and Bandouin advise operation after subsidence of inflammatory symptoms. Bazy (1893) publishes the first antoplastic operation in France which Küster had already practised, Albarran advises ureteral catheterization which Guyon and he recommend in 1897 and 1898 in showing the secretory value of the pouches of renal retention and the advantage of conservative operations. Pawlik, Kelly, Albarran, Tuffier, Michon and Pasteau recommend ureteral catheterization preliminary to the autoplasmic conservative operations of Küster, Bazy, Fenger.

2. URETERAL CATHETERIZATION AS AN INDICATION IN THE TREATMENT OF MOVABLE KIDNEY.—In the treatment of intermittent hydronephrosis with movable kidney, the conditions are favorable for ureteral catheterization, since there is no infection of the lower urinary passages. This catheterization admits the possibility of making the diagnosis of retention, of the condition of the ureter, of the secreting power of the kidney and also of its congener. It may suffice to cure some cases taken at the start (Schwartz and Imbert, Albarran, Michon and Pasteau,

Pawlik). During nephropexy it serves to mark the ureter more easily and to point out the indications for an autoplasic operation.

3. CHOICE OF OPERATION.—We should be able to dispense with ureteral catheterization and make our diagnosis by more simple means, phonendoscopy, palpation (Guyon, Glénard, Israël), inquiry into the crises, &c., which will permit the exclusion of cysts of the abdomen, affections of the liver, &c.

Save in case of absolute urgency (anuria), it is better to operate after subsidence of inflammatory reaction, rather than during a crisis.

The operation of choice is fixation of the kidney by the lumbar route whether it be nephropexy or nephrostomy with nephropexy. After having thoroughly explored the kidney, its hilum, the ureter, which may be catheterized by the natural route or by retrograde catheterization; the condition of the ureter will call for the following conservative operations:

a. *Uretero lysorthosis* (of Rafin), who cuts the bands holding the kinks of the ureter and reestablishes its correct position.

b. *Section of a ureteral spur* (Fenger) simply or with suture of the two lips of the section respectively (Trendelenburg, Bardenheuer).

c. *Uretero-pyelo-neostomy* of Küster, the *pyelo-plicature* of Israël or the *capitonnage* of Albarran, if there remains a pelvic pouch then we can do a pyelo-ureteral anastomosis (Bardenheuer) with or without resection of the pouch (Albarran).

d. If the upper portion of the ureter cannot be freed, the *uretero-pyelo-neostomy* of Bazy, Küster, Bardenheuer should be done or ureterotomy, or lateral anastomosis (Helferich, Albarran).

These operations which are long and precise should only be performed after assuring ourselves of the general good condition of the patient, the condition of the opposite kidney and the integrity of the lower portion of the ureter. They should be performed after subsidence of inflammatory reaction and often as a secondary operation after recovery from a primary operation, above all if the hydronephrosis is infected.

Nephrostomy should be preferred if the lesion is far advanced or double, if it is believed that there is only one kidney or doubt about the other kidney, or if the general condition of the patient is below par.

Nephrectomy should be reserved for cases of long standing where the renal pouch has lost all secreting value and for those cases where the opposite kidney, being healthy, autoplasic operations are impracticable.

4. CONTRA-INDICATIONS IN OPERATION FOR MOVABLE KIDNEY.—These are the same as for any major operation. Albuminuria need not always be a contra-indication, for Menge (of Leipzig) has published cases of transitory albuminuria due to maneuvers of exploration and disappearing after repose. A cachectic state is not an absolute contra-indication (Bazy), nor a neurasthenic condition (case of Smith); but in a general way the dyspeptic and neurasthenic forms may be considered as contra-indications.

5. CONCLUSIONS.—Not one of the causes put forward to explain the pathogenesis of movable kidney suffices unless we count that of congenital predisposition and heredity.

Operative indications, exceptional in the dyspeptic and nerasthenic forms, give greater promise of success in the painful form, which should be operated upon after orthopedic treatment has proved unsuccessful.

Early operation should be performed in the cases accompanied by intermit-

tent hydronephrosis in order to avoid ultimately the necessity of a long auto-plastic operation.

DR. PAUL DELAGENIÈRE.—The causes put forward to explain renal ectopy are in reality the predisposing causes.

The determining cause, perhaps essential, is strain.

Strain, it seems to him, alone can suffice in certain cases to produce displacement in individuals absolutely healthy, without ptosis, &c.

But if the dystrophy, enteroptosis, &c., is present to enfeeble the means of fixity already insufficient of the kidney, the effort necessary to bring on displacement will be just so much diminished.

He insists, above all, upon pregnancy as a very important cause which can by itself exert a triple action.

It often brings on the dystrophy; it provokes ptosis; it necessitates during parturition those violent efforts so much the more efficacious than those put forth in subjects predisposed.

For treatment nephrorrhaphy *en échelon* by the method of Professor Guyon has given at his hands only two unsuccessful cases out of twenty-two, and one of these two had a miscarriage some months after the nephrorrhaphy.

Pathogenesis.—DR. L. LANDAU.—Movable kidney is an acquired malady. There does not exist a single observation, anatomical or clinical, which can prove an origin which was congenital or an innate insufficiency of the means of holding the kidney.

Narrowness of the lower portion of the thoracic cage constitutes a predisposition.

These are the real causes:

A. CAUSES OF ANATOMICAL ORIGIN.

a. Rapid diminution of the adipose tissue a result of many maladies, febrile or apyretic.

b. Repeated and considerable modification of the intra-abdominal equilibrium.

From these causes results the diminution of the tension and elasticity of the abdominal walls of the skin, muscles and peritoneum. The abdominal muscles atrophy or become simply paretic and insufficient to hold the abdominal contents.

Hernial form, general enteroptosis, shows itself in *Venter pendulus*.

c. Inflammation and suppuration in the retro-renal connective tissue, for example, in Pott's disease.

d. Scoliosis and kyphoscoliosis.

e. Prolapse of the genital organs, prolapse of the uterus, prolapse of the vagina.

f. Primary maladies of the kidney; hydronephrosis, renal tumor.

B. CAUSES OF ORIGIN, PHYSIOLOGICAL OR MECHANICAL.

a. Exaggerated action of all the muscles of the abdominal cavity; great effort, excessive contraction, obstinate constipation, the lifting of heavy objects, whooping cough, &c.

b. Traumatic accidents.

Movable kidney is not then generally an essential malady, but is an accessory phenomenon occurring in the suite of other morbid states.

SYMPTOMS.

1. The symptoms in cases of movable kidney are very varied.

2. Movable kidney may cause disorders and accidents due to functional disturbances in the kidney itself. We may see:

- a. Repeated congestions caused by circulatory disturbances in the kidney.
 - α Venous hyperemia; hematurias, very rare, it is true.
 - β The so-called strangulation by sudden torsion of the renal vein.
- b. Hydronephrosis and pyonephrosis simple and intermittent, caused by kinking of the ureter.

TREATMENT.

1. It is necessary to take into consideration the maladies and morbid conditions accompanying movable kidney. Orthopedic treatment, massage, gymnastics, hydrotherapy, electricity.

He advises against the application of a bandage with a pad to the movable kidney itself; but rather an abdominal binder to the hypogastrium.

2. A nephropexy which transforms a kidney displaced though movable into a kidney displaced and fixed is generally useless and sometimes harmful.

3. It is only admissible when functional disturbances of the kidney exist and the usual therapy is insufficient.

4. The special treatment of hydronephroses and pyonephroses as well as of calculus, and pyelitis is the same whether the kidney is movable or not; mobility of the kidney facilitates as a matter of fact all surgical interventions.

Dr. Pousson has operated on but sixteen cases of movable kidney, though he has seen a large number. He has practically only interfered in those cases where the symptoms appeared to have direct relation with the nephroptosis. This is a point of pathogenic diagnostic importance from an operative point of view, and particularly delicate outside of these cases where there exist anatomical and functional alterations of the kidney, although in these same cases a cure is not always obtained after nephropexy, for, in certain predisposed cases, replacement of the kidney creates a neuropathic state which persists in simple reinstatement of the organ into its place and even becomes aggravated.

Of the sixteen cases operated upon by Dr. Pousson, eight presented the painful form, four the dyspeptic form, two the neurasthenic form; one had attacks of intermittent hydronephrosis; and one finally had profuse attacks of hematuria every time she maintained a standing posture for several hours.

None died from the operation, but two having had the kidney infected had to undergo nephrectomy. One of these patients had an attack of cystitis at the moment of operation, and the infection was of an ascending origin; in the other the infection took place directly upon the wound. In this latter case the patient had a displaced kidney, giving rise to profuse hematurias. Having incised it to discover the cause of the bleeding, he found at the level of the junction of the ureter with the pelvis a small valve obliterating the lumen in part and incised it. The kidney having bled abundantly, was tamponned and this tampon was the point of infection.

The fourteen other nephropexies were not followed by any operative complication. This new report adds to the statistics already published showing the comparatively slight gravity of intervention in nephropexy. As to the therapeutic result, nine of the cases only have been followed for a sufficient length of time to appreciate it. Four of the eight cases with the painful form have now remained cured for several years. The four others were lost sight of too soon. Three of the four with the dyspeptic form recovered from the nervous troubles of their digestive apparatus; only one of the two neurasthenics regained perfect health, but after presenting phenomena of post operative psychosis; lastly, the patient with intermittent hydronephrosis was definitely cured.

Not having confidence in the employment of catgut to maintain the fixation, as he had been obliged to re-operate in one case in which he had used only absorbable sutures, Dr. Pousson always suspends the kidney to the last rib by a plain silk which serves for the other points of suture of catgut.

Being given the frequent cases of failure in the dyspeptic and neuropathic forms, Dr. Pousson asks whether it would not be expedient in the course of an operation in which attention should always be directed to the pedicle of the kidney, in order to verify the mode of union between ureter and pelvis, and the condition of the vessels, to take this time in the operation to exclude the nerves of the renal plexus and to influence the solar plexus *à distance*. The excellent results obtained by Dr. Jaboulay in severe neuralgias of the pelvis and other painful accompaniments of the abdominal viscera and even of the limbs by an intervention upon the sensitive fibers of the grand sympathetic open a new view in the therapy of the complex of renal ectopy.

Pyelo-Nephritis in Movable Kidney.—DR. ALBARRAN in 1895 first called attention to this frequent complication of movable kidney. He has been able to observe a large number of cases in which the renal infection developed without marked disturbance, scarcely more than a slight rise of temperature, some pain and with cloudy urine. At other times (four operations) the acute pyelonephritis gives rise to a general grave condition with fever showing marked oscillations and passing 40° C.

In these acute cases operation should be delayed because a nephrostomy not opening upon a collection of pus but indeed a kidney affected in its entire parenchyma would not offer much chance of success. It is better to institute a medical treatment (serums, diuretics, revulsives), which succeeded very well in the four cases treated, and to wait for the cessation of the crisis. When after twenty or thirty days the fever has disappeared, the reappearance of new attacks may be prevented by nephrorrhaphy; the operation made at this time is simple and gives excellent results.

DR. DURET.—When in 1888 he published his two cases of painful kidney in nephroposis treated by nephropexy considerable incredulity was expressed as to the real efficacy of suture of the kidney and the permanency of the results. From the start he had recourse to experimentation; the very demonstrative results of which were given in the thesis of Dr. Vaneufville to the Faculty of Paris (1888). Since then other experiments by Tuffier and Albarran are confirmative.

He proposed now to establish: 1. That the anatomical process of fixation of the kidney in experimental nephropexies and in nephropexy in man give a definitive condition of fixation of the kidney if they have been well done.

2. That the remote clinical results of nephropexy are satisfactory if only the precise and justifiable indications are followed.

On the first point it is only necessary to refer to the experiments reported by Vaneufville.

In dogs whose kidneys are endowed naturally with a certain mobility he establishes after methodical nephropexy the fixity of the kidney which cannot be displaced in any sense because of the formation of a fibrous pedicle, which is implanted beneath the lumbar wall at the level of the incision, so resistant that on trying to detach the kidney an anatomical piece is torn off with it, maybe a fibrous layer of one and one-half to two centimeters in thickness, formed by the posterior layer of the adipose capsule of the kidney and two or three conoid fibrous ligaments which attach the kidney to the vertebræ and last rib. An

anatomical examination made after a nephropexy shows according to a case cited by Dr. Duret that the same thing occurs in man. In a woman dying of tuberculosis five months after an operation of this kind, of which the observation is given in detail, a membraniform ligament was found, its dimensions being six centimeters in length by 2 cm. in thickness.

It extended to the superior pole of the organ, and was firmly adherent to the first, second and third lumbar vertebræ and the corresponding discs and to the twelfth rib.

Upon the second point, remote results of nephropexy, he reports very interesting results. He has only done a comparatively small number of nephropexies, about a dozen, because he has selected his cases: Complete nephroptoses in which the organ could be circumscribed by palpation, traumatic or otherwise, with or without intermittent hydronephrosis. He has avoided cases of general enteroptosis, corresponding to the descriptions of Glénard. In the few cases reported by him the cases have been seen three, five, seven, and twelve years after operation. Fixation of the kidney has persisted and the results have been complete from a functional standpoint. He draws the conclusion that nephropexy well done (by double puncture of the adipose capsule, and by ligature attached to the twelfth rib and traversing the capsule proper and a little of the parenchyma of the kidney) has given absolutely durable results.

Movable Kidney and Renal Neuralgia.—DR. DESNOS reported a case of a young woman twenty-five years old with movable kidney and extreme pain in the kidney region; with rest in bed there would be complete subsidence of the pain and a return of the kidney to its proper place. Nephropexy was performed April, 1899. The pains disappeared during the time she remained in bed the three weeks following the operation. After she was up they reappeared and gradually increased to such a degree that eight months after she returned and begged to have the kidney removed. Abdominal palpation showed a large mass felt through the abdominal wall, and he believed that he had a recurrence of mobilization to deal with together with twisting of the ureters and a production of hydronephrosis. Upon operation he found that the kidney was firmly fixed in its proper place, and the mass he had felt on examination was the liver which had descended and was movable. Taking into account the nature of the pains which were strictly renal and their violence he decided to remove the kidney nevertheless. After operation the pains had disappeared. There persisted a certain abdominal sensitiveness, but diffuse and of an entirely different character, which he believes explains the neuropathic phase of the malady.

Movable Kidney. Pathogenesis and Treatment. —PROFESSOR TEDENAT.—After discussing the question in which his views were largely in accordance with the preceding authors, he reports nine nephrorrhaphies on the right side: seven patients were perfectly cured, two continued to suffer and were obliged to wear the belt devised by Glénard.

Two cases of nephropexy on the left side for adhesions between kidney and colon, gave good results.

Movable and Painful Kidney in Its Relation to Nephritic Colic.—DR. GALLAND-GLEIZE believes that from a sufficient number of cases observed in his practice he can draw the following conclusions.

1. The authors have not sufficiently insisted upon the frequency, much greater than is generally believed, of the painful crises which occur in the course of prolapses and movable kidney of which the physiognomy, the carriage and gait re-

semble singularly those of frank nephritic colic due to calculus, and which are, however, entirely independent of urinary lithiasis; these crises due to this condition are never accompanied by notable disturbances of urination; neither before, during nor following the attack, have blood, gravel or sand been found in the urine.

2. They do not appear to the author to have established with sufficient precision a distinction between the various conditions of pain which traverse, as an acute episode, the course of prolapses and movable kidney. They have had intermittent hydronephrosis too much in view. Now, the facts which he has observed have a physiognomy which distinguishes them sufficiently clearly from the attacks due to hydronephrosis.

In not one of his cases was he able to note marked true disturbances to the urinary function during an attack. There was neither anuria nor oliguria. On palpation the kidney never appeared increased in volume. In no case did he observe a great flow of urine following the disappearance of the tumor and the pain which is noted in acute intermittent hydronephrosis.

By all these characteristics, the painful accessions which he had noted distinguish themselves thus clearly from the crises due to hydronephrosis.

To sum up, it is by careful study into the antecedent history of the patient, a minute inquiry into the exact condition of the urinary function, a careful examination of the quality of the urine at the moment of the accession of the pain, after it and also during the interval, finally, it is by attentive and methodical exploration of the renal region that the physician will arrive at a diagnosis exact and reasoned out from the occurrences found and eliminate all the causes of error.

What explanation, then, can be given for the painful crisis? He has none better to propose than that indicated by Tuffier and it is to that author that he turns.

As to the treatment which is applicable to them, there is no other except that, well understood, of the prolapsed kidney on the occurrence of which they made their appearance.

DR. CARLIER has operated upon eight cases only for movable kidney, though he has seen a large number. He does not believe that movable kidney is a stigma of degeneration, for it is impossible then to understand how it is that this malady attacks almost solely the feminine sex, and besides among such a large number of patients it is rare to find other signs of degeneration. As to himself, the influence of menstruation is undoubted; also we meet with movable kidney mostly during the epoch of genital activity. Movable kidney with painful symptoms are scarcely seen in old women because menstruation ceases to influence movable kidney. Dr. Carlier always employs catgut in his nephropexies, taking care to fix the kidney to the loose rib without disturbance to the pleura, through which the needle can be passed with impunity. It appears to him that the kidney unquestionably again becomes slightly mobile and this is fortunate; because the slight lengthening of the adhesions permits the kidney to be subject to the influence of respiration. Normally the kidney is slightly movable, and it seems to him entirely natural that after operation it should become slightly mobile as are all the abdominal organs.

DR. HÉRESCO has operated upon a woman 54 years old who had suffered for five or six years from renal pain. The crisis became more and more frequent, and the patient could practically no longer walk. Her urine was clear in spite

of frequency of urination. On palpation the lower pole of the right kidney could scarcely be felt. From the beginning the woman scarcely left her bed, where she lay stretched out, upon her right side, suffering frightfully and begging for an operation. A nephropexy was made April 16 of this year. Exposure of the kidney was easy, there was almost total disappearance of the adipose capsule. The pelvis was not distended. The kidney was fixed after Guyon's method. Operation succeeded. The speaker insisted upon the following points: (a) the pain disappeared immediately upon intervention; (b) the absence of distention of the pelvis makes us think that the pain may have been caused by the traction exercised upon the nervous plexus of the renal pedicle; (c) the advanced age (54) of the patient is a rare condition for nephroptosis. For explanation of this condition he cited the large number of deliveries this woman had had.

Movable Kidney with Displacement Behind the Stomach.—DR. P. HARMONIC.—Ordinarily the displaced kidney travels downward towards the pelvis.

More rarely it undergoes horizontal displacement and passes inward towards the vertebral column. In this latter case the characteristic clinical picture is on the one hand intensity of the painful phenomena, and on the other absence of urinary symptoms.

The horizontal displacement is never absolute, it coincides with a certain vertical displacement. But this latter occupies second place in the clinical picture.

Dr. Harmonic publishes a case, 38 years old, extremely neurasthenic in whom in consequence of rapid emaciation due to an entero-colitis, the kidney was displaced in a horizontal direction.

The consequence was an atrocious pain, gastralgiform, occurring by crisis every time the patient attempted to lie on her left side. At the time of these periods, the patient would have an attack of vomiting with cold sweats and faintness. It only sufficed for her to turn on her right side for the crisis to disappear as if by magic. If she got up the pain diminished but less rapidly than under the preceding condition.

At the moment of the gastralgic attack, palpation would reveal the presence, in the median line, upon the vertebral column, below the xiphoid cartilage, of a hard elongated tumor, the size of an egg. It seemed like a neoplasm of the stomach.

It was simply the displaced kidney which slight pressure served to put back in position, and this manœuvre would stop the suffering. It is probable that the painful crisis was due to the compression of the solar plexus by the displaced organ.

Dr. Harmonic performed a nephropexy, which was the only therapeutic resource. As a matter of fact a bandage, which in the beginning had sufficed to give relief while the displacement was exclusively vertical, had become entirely useless when the displacement took place behind the stomach.

In this case the operative difficulty consisted in bringing the kidney, which fell by its own weight toward the vertebral column, up into the wound. He was obliged to transfix the kidney by means of a long curved needle directed by the index finger.

Four silk ligatures traversed the kidney, and were knotted, after the technique of the operator, upon the surface of the skin, after the wound had been

sutured. Each of these ligatures were removed two or three days after the second week.

The patient recovered completely and has continued in good health.

DR. LEGUEU considers movable kidney as the local and often the only manifestation of a general malady, bearing upon the fibrous, muscular and nervous tissues. This is often congenital in this sense, that the individual carries from birth the morbid predisposition.

The predominance so marked in the feminine sex should be sought in those conditions special to this sex, among which pregnancy, menstruation with its periodic congestions appear to him to play the most important rôle.

He has operated but little in movable kidney because he considers as concomitant and not as secondary the neurasthenic and dyspeptic phenomena which often accompany this condition. But he does not doubt that movable kidney in some cases reacts upon these symptoms to aggravate them.

From this cause comes the difference in the results obtained. One patient obtains complete relief, another gets only an illusory benefit from the operation.

He operates upon movable kidney with complications, also upon those simply painful; but he never operates for this reason alone, that there is movable kidney and dyspepsia or neurasthenia. When, however, at the same time that these symptoms are present there are also painful manifestations he has done the operation with excellent results, even as to the neurasthenia and dyspepsia. Under other circumstances he contents himself with prescribing a binder without a pad, as he has never seen a case where the pad maintained the kidney constantly and effectually in place.

Condition of Vascular Supply in Movable Kidney.—DR. PASTEAU.—There exists in renal ectopy and movable kidney a series of transitions which does not permit of their consideration as affections absolutely distinct.

We may divide movable kidneys, from the point of view of their displacement, into two grand classes, according as the kidney is displaced absolutely vertically, or as it descends more and more obliquely toward the median line until it becomes almost transverse in the umbilical region.

It is in the case of vertical descent that we meet the maximum lengthening of the vascular pedicle and this lengthening may be considered as congenital and primitive.

In the case of oblique movable kidney, the vessels are always less distended. It is well in this category to bear in mind the observation of luxation of the kidney, characterized by a sudden onset and painful phenomena due to congestion of the kidney from torsion of the pedicle.

DR. FRANZ GLÉNARD discussed movable kidney from the point of view that this malady in many cases is but an insignificant factor in the more important condition of enteroptosis.

DR. PAUL DELBET, after having followed several cases of movable kidney and read the greater portion of all that has been written, has arrived at the conviction that this malady is an affection almost always of uterine origin and that it is the consequence of an attenuated infection.

SECOND SÉANCE.

Treatment of Gonorrhea Complicated by Orchitis.—DR. BRIN has treated eleven cases of this kind, and contrary to the generally accepted opinion has practised immediate lavage of the urethra.

In one case only, the patient being very profoundly affected, was there a febrile rise the day following the first lavage, in consequence of which he interrupted the treatment.

In the other ten cases the success was marked. The testicle became painless from the second or third day. The swelling rapidly subsided, and so far from causing a relapse on the part of the testicle, the irrigations led to a cure of the testicular complication in the same time as the urethritis itself.

In order that the irrigations shall be without harm in these complications they should be made with but little pressure and with weak solutions.

There is no contra-indication to these irrigations except the condition of acuteness of the inflammatory lesions of the urethra, prostate and bladder.

Intensity of the testicular inflammation is not a contra-indication.

The advantages of this method are:

1. The gaining of time, the 10 or 15 days which the epididymitis lasts.
2. To induce rapidly the indolence of the testicle.
3. To permit the patient to quickly to work; several of his patients did not even go to bed even from the first day of treatment.

Dr. ESCOT shared this opinion and made irrigations in every case complicated with orchitis or prostatitis, except during the acute period treatment called for antiphlogistic measures.

In twelve years' experience he had not seen a dozen cases of orchitis. He preferred, however, instillations of protargol to irrigation.

Dr. BRIN feared instillations, which he thought were contra-indicated when orchitis appeared.

Dr. GÉNOUVILLE had never seen orchitis in patients in whom he had used irrigations; at the most the testicle sometimes became slightly sensitive for one or two days, but nothing more. As to patients who came with orchitis, particularly when it was on the decline, he never hesitated to irrigate, and he was always pleased with the results; the pain quickly subsided and the resorption of the orchitis was very rapid.

Diagnosis and Therapy of Certain Chronic Urethritides.—Dr. MOTZ.—The question of chronic urethritis is one of the most complex. The great number of theories of the pathogenesis and therapeutic indications clearly show the need of precise ideas. We must admit, however, that it is the lack of anatomo-pathological knowledge of urethral lesions which is one of the principal causes for all these opinions and hypotheses which are every day promulgated on chronic urethritis.

Thanks to the researches of Finger, Wassemann and Hallé we now possess the fullest description of the lesions of these conditions. These authors have shown that the lesions are diffuse and that they may penetrate far from the mucous surface and invade even the corpus cavernosum. The infiltrations are disseminated into the connective tissue and muscular stroma and ordinarily invade the glands found there. Pathological anatomy has shown us at the same time that we may have a complete cure of the mucous and submucous tissues by the formation of a sclerosis more or less pronounced although the inflammatory condition of the urethra persists. The foci of infiltration in these cases are found in the corpus spongiosum and are localized above all around the glands of the urethra, that is to say, they are situated far from the mucous surface.

Based upon the study of a large number of chronic urethritides, we may affirm that these adenities of the corpus spongiosum are the principal cause essential to the long duration and difficulty of cure of the great majority of cases of chronic

urethritis. These anatomo-pathological findings are in accord with the results of clinical observations which show us the tenacity of all varieties of adenitis.

It is then an absolute necessity in order to direct a successful therapeutic application of these urethrites to examine by every possible means, in order to discover the extent and depth of the urethral lesions.

Urethroscopy may in certain cases give us valuable information. But without entering into a discussion as to the importance of urethroscopy in general, it suffices to study, from the point of view of the microscope, some chronically inflamed urethrae, in order to see that there are lesions either situated far from or separate from the surface by embryonic infiltrations of the mucosa, the existence of which cannot be established by a simple inspection of the mucous membrane.

Anatomo-pathological study, if it has not enabled us to remedy, has at least shown us the inefficiency of our diagnosis, and the depth and variety of urethral infiltrations.

The author began about two years ago to examine all cases of chronic urethritis by palpation that he could. This mode of examination, which has never, up to a certain point, been methodically employed by urologists, has permitted him in a certain number of cases to note the variety of the lesions and to form the prognosis and the therapeutic indications.

Direct palpation is insufficient to give any result; it should be made upon a rigid sound; the best is a Bénigüé sound of large calibre. An attentive examination in this manner of normal urethral habituates the hand to note with just facility all infiltrations and nodosities which present for three-quarters of the circumference of the anterior urethra. These chronic infiltrations rebellious to treatment ordinarily present themselves for the most part in the form of round nodosities, hard, glandular or in the form of diffuse plaques. The localized rounded infiltrations may sometimes reach a considerable size, such that the patient himself may feel them by simple palpation and note their diminution or augmentation.

Unfortunately this examination cannot give complete information of the anterior urethra, for the superior portion beneath the corpus cavernosum cannot be perfectly palpated; still it can render good service when the lesions are not situated exclusively in the superior wall.

The establishing of the presence of these infiltrations is important for prognosis and therapeutics.

The prognosis of these cases is bad and it is our duty to so warn our patients.

As to therapy, we may be sure that above all in the case of nodosities, all lavage, instillations and cauterizations of the mucous membrane will accomplish nothing because the lesion is deep and often glandular.

We need not stop palliative treatment but should begin from the start with mechanical treatment.

This treatment consists in dilatation for at least ten minutes with large metallic sounds, followed by a massage of the urethral infiltration upon a Bénigüé sound.

We should not deceive ourselves and think that it will suffice to make a few slight massages of these urethral infiltrations in order to obtain a rapid resolution of urethritis which may last years. The treatment demands a gift of patience on the part of both patient and physician. This treatment will give the

physician the conviction that he is following the shortest road which leads to a cure of his patient, because it is in accord with that now applied to all chronic infiltrations as in the prostate, peri-urethritis, &c.

The results already obtained in a respectable number of cases in his private work as well as at the Hecker Hospital have convinced him absolutely of the utility and the necessity as well of urethral palpation, and he considers it his duty to examine in this manner all cases of chronic urethritis in his care. This method has permitted him to obtain rapid results in certain cases of urethritis with gonococci rebellious to classical treatment and has given him the satisfaction of being able to cure several patients, affected for years, with urethritis non-gonococci, which had been treated and abandoned as incurable by better urologists than himself.

DR. HENRY REYNÉ.—In searching the causes of chronic urethritis we should not only examine the urethra, but also the adnexa; by rectal touch and by urination in several glasses we may ferret out with perfect precision the prostatic or vesicular lesions which keep up a urethritis. In several cases he has been able in five or six séances by massage of the prostate or vesicles to bring about a rapid cure. This mode of exploration well known to specialists is worthy of being recalled to all physicians.

Treatment of Gonorrheal Arthritis by Arthrotomy.—**DR. PAUL DELBET.**—Gosselin was the first to advise aspiration of articulations attacked by gonorrheal arthritis. Rendu employed aspiration followed by sublimate injections with success. The true surgical period begins in 1892 with Thierry, Walther, Tédinat, Spencer. However, and in spite of theses of Hopenkender, Parizeau, Ibref, the method appears to have been extended but little. Forgues and Reclus only have recommended energetic intervention.

Intervention is perfectly rational, because it has been shown that gonorrheal rheumatism is only a joint infection. Two cases well marked are given. The first was a young patient with a tibia-tarsal arthritis whom he had heated medically; it took six months to cure and the case ended in ankylosis. In the second case, he treated by incision an arthritis of the knee joint. The patient was immediately relieved and was cured in five weeks with a mobile joint. He advised arthrotomy in all cases when the treatment by immobilization and revulsion does not bring about rapid relief, in pyarthritides, and very painful arthritis and arthritis with threatening ankylosis.

NEW YORK DERMATOLOGICAL SOCIETY.

300TH REGULAR MEETING, NOVEMBER 26, 1901.

J. M. WINFIELD, M.D., *President.*

Epithelioma of Cheek.—Presented by DR. C. W. ALLEN.

The patient was a gentleman who had been treated by him with caustic paste and electrolysis, and subsequently with the X-rays. The last-mentioned treatment he proposed to continue for some months as a prophylactic measure. He thought the epithelioma had been cured two or three months ago, but as a precaution he had continued the treatment.

DR. G. H. FOX said that he did not understand why Dr. Allen should use the paste, the X-rays and electrolysis all in the same case. A small epithelioma on the cheek or on the forehead could be thoroughly curetted under cocain without annoyance to the patient, and could be speedily cured in most instances. This was the shortest, pleasantest and, in his opinion, the most effective method of treatment. In an extensive case of lupus the curette would remove a large portion of the mass but would not prevent nodules springing up in the cicatricial tissue. By the use of a dental burr, however, one could destroy all of these nodules and set up enough inflammation to kill lupus or the epitheliomatous cells, and produce an absolute cure of the disease. The inflammation thus produced seemed to him similar to that caused by the paste. He had learned from experience that if the boring with the dental burr were done thoroughly in a case of lupus, however extensive, the case could be cured in less time than by the X-rays or the Finssen therapy. There were some cases of epithelioma so extensive that success could only be looked for from surgical operation.

DR. GEORGE THOMAS JACKSON was surprised at the doctor's remark as to the use of the X-rays as a prophylactic. This was to him a new idea, and one which he had not seen mentioned in the literature of X-ray therapeutics.

DR. DANIEL LEWIS said that he had had no experience with the X-rays in the treatment of cancer, but last summer he had seen Mr. Clark's case in the Middlesex Hospital. That patient, a woman of about seventy, had a cancer covering the entire site of the right mammary gland, and involving the skin chiefly. It presented a rough, nodulated, ulcerated surface. She had been treated daily since last March by exposure of about fifteen minutes to the X-ray. The photographs showed that the ulceration of the cancerous tissue had been reduced nearly one-half, but no progress had been made beyond this point during the last two months. This was in accord with his own experience with other agents. For example, a few years ago pyoktanin had been found to produce good results up to a certain point, but beyond this one could not go. In the case under discussion it seemed to him that the best thing to do with the central nodule was to remove it with Keyes' cutaneous punch. This instrument he had improved by having it made with a longer handle. He did not now use caustics as frequently as he did ten years ago.

DR. P. A. MORROW said that as the X-rays might be considered as yet on trial, and their value somewhat *sub judice*, he thought it would be better to use that treatment exclusively in these cases. Something was known of the value of curetting followed or not by caustics; also just what could be accomplished by caustics alone. Where other treatments were employed in conjunction with X-rays, as in the case reported by Dr. Allen, it was very difficult to determine the precise measure of therapeutic value to be attached to the X-rays. The speaker said that he had a number of times removed small epitheliomata which were sufficiently circumscribed to be brought within the circle of the cutaneous punch, and in perhaps half a dozen cases he had, with a slightly larger punch, taken a portion of healthy skin and transplanted it. The union had been perfect in each one of these cases, and there had been no contraction. In one case, which he had submitted to the American Dermatological Association years ago, the line of union of this circle of transplanted skin could not be discerned by the naked eye, though it could be made out under a magnifying-glass. Of course, in such cases he made a section deep enough to take in the entire thickness of the true skin. It was astonishing with what rapidity union would occur.

Dr. J. A. FORDYCE said that it was superfluous to treat these small circumscribed epitheliomata of the face by means of the X-ray; the use of the curette seemed to be sufficient, though he preferred to follow the curette with the application of the Paquelin cautery or of the caustic paste. He had seen several recurrences take place and the disease decidedly aggravated by curetting without the subsequent use of caustics.

Dr. MORROW said that yesterday he had had at the New York Hospital a case of epithelioma of the root of the nose, which illustrated what Dr. Fordyce had just said. The patient had been treated several different times simply by curetting the surface. She had returned with a recurrence. He had finally curetted and then applied chloride of zinc. This had been done three years ago and the result was a perfect scar with absolutely no evidence of recurrence. The patient had returned because of another epithelioma located at the hairy scalp some three or four inches distant. It had always been his practice to use either the cautery or some chemical caustic, preferably the chloride of zinc, after the curetting. In this way deep-lying cells could be destroyed that would otherwise probably lead to a redevelopment.

Dr. FORDYCE recalled the case of a woman who, three years ago had had curetted a small epithelioma at the wing of the nose. She had not returned for some time, and when she had done so there was an enormous epithelioma of the nose, and the new growth was the size of a hen's egg. She had had numerous hemorrhages, and he believed was now dead. This little growth had taken on a new growth after curetting, and this might not have occurred if caustics had been used.

Dr. LEWIS said he wished Dr. Morrow or Dr. Fox would explain the advantage of first curetting and then using an escharotic such as the actual cautery. Personally, he could see no logic in such treatment.

Dr. MORROW said that sometimes epitheliomata were so situated that, for cosmetic considerations, if for no other, one did not desire to remove too much tissue. If an incision were made sufficiently wide to go beyond all possible infiltration, or if the curette were used to the same extent, there would be no indication for the subsequent employment of the cautery, but in many cases one did not destroy the tissues so widely. He was of the opinion that these chemical caustics have more or less of a selective action, and will destroy cancerous tissue more rapidly than healthy tissue, and that in this way one could get a maximum result from a minimum loss of tissue. Moreover, a large mass of tissue could be removed painlessly with the curette followed by the caustic, whereas it could not be done with the caustic alone except by a painful and tedious process. He had tried the dental burr, but had found that the patient complained a good deal of the pain.

Dr. FOX said that it was certainly true that the curetting process was quick, almost painless and efficient. The return of a small epithelioma after curetting was usually because the curetting had been superficially done. Even with the most thorough curetting lupus and epithelioma were apt to return because of small prolongations going down into the tissue beyond the reach of an ordinary curette. After curetting, these prolongations were exposed and could be reached by a fine Paquelin cautery, which will also destroy healthy tissue, or by chemical caustics which have a selective action or by the dental burr which is preferable. He had recommended the use of the burr in the treatment of lupus many years ago, and now, after years of experience with it, he would not think of using

either a caustic paste or the Paquelin cautery. The dentist does not, in treating a carious cavity in a tooth, cut out a solid block of dentine, but, guided by the sense of touch, pushes the burr in all directions in which diseased tissue lies. One can operate in the same manner upon the skin and just as well blind-folded as with the eyes open. The burr reaches all the morbid tissue, which is softer than the healthy skin, and it effects a permanent cure. He wished others would try the burr and compare their results by this method with those obtained from other methods.

DR. ALLEN said that the X-rays were not supposed to act as a chemical caustic, indeed, it should be used in such a way as to avoid the production of a dermatitis. He thought many of those who had spoken had lost sight of one important point. The moment a burr or curette is used one does a cutting operation, and there is danger of leaving behind a certain amount of invisible diseased tissue besides opening up channels for possible dissemination. The caustic paste seemed to follow out this diseased tissue even where the eye could not go. There were clinical data to substantiate this view. We knew that after cutting operations recurrences are to be expected.

Epithelioma of Finger.—Presented by DR. ALLEN.

DR. ALLEN said that to illustrate his views on this subject he would present another case, that of a gentleman sent to him by a physician in Chicago, Dr. Pusey. Since birth the gentleman had had upon his ring finger a pigmented mole. He had always worn a ring to hide this mole. The ring had often caused irritation, especially for the past two years. In July last, ulceration and tumor formation had begun at the site of this irritation. A diagnosis of sarcoma had been made by a very competent physician, but this diagnosis had not been confirmed by a microscopist. The growth had been excised at Hot Springs. Two months ago the growth had recurred in the form of a series of wart-like pearly nodules extending deeply into the tissues with surrounding induration. A little over one month ago the lymph nodes of the axilla had begun to enlarge, but had not been tender. A portion of the growth had just been excised for microscopical examination. He proposed to treat the case by the X-rays, possibly after the use of caustic paste and excision of the nodules. After an application of the paste he employed the X-rays in the hope that they would seek out and destroy the last vestiges of disease. If the X-rays would do this we had a new and important means of treatment. If one were likely to get recurrence after cutting, why should not recurrence follow curetting? His own method was to use the curette lightly, simply to scrape off the loose tissue and prepare the field for the use of the paste. He did not feel that this does any harm because new channels for possible infection and dissemination of the disease are not thus opened up.

DR. FORDYCE advised excision of the axillary lymph nodes, and Drs. H. H. WHITEHOUSE and G. T. JACKSON concurred in this opinion.

DR. JAMES F. JELKS, of Hot Springs, Ark., present by invitation, said that this man had been sent to him from Chicago by Dr. Pusey and he had diagnosed epithelioma and had removed it by excision. He had dressed the case for a few days, and then the man had not returned. Evidently recurrence had taken place in the scar, and he thought nothing could be done except in the way of surgical procedure. He would favor removing the whole finger and then taking out the lymph nodes under the arm, following up the chain of lymph nodes. He saw no other hope for the young man.

DR. C. W. ALLEN said that this was practically what he had proposed to do, not thinking it justifiable to experiment on this case with the X-rays. He expected to apply the X-rays to an obscure condition of the abdomen in an old gentleman. The person was too old for operation, and the condition was suspected to be malignant. Dr. Allen said that fourteen years ago he had removed a woman's breast for carcinoma, with the assistance of Dr. Daniel Lewis, and had cleaned out the axilla thoroughly, and the patient was alive to-day without any sign of recurrence.

Two Cases of Favus of the Nails.—Presented by DR. C. W. ALLEN.

The patients were two young women. The first was a lady of twenty years, whose right index finger had been affected for three years, and that of the middle finger for several months. The other nails were healthy and perfect with the exception of the fourth on the left hand. Here the disease appeared to be commencing on the attached posterior border. If this were an example of auto-infection on this unusual portion of the nail, it had probably occurred through the use of a manicure instrument. The mother had had a similar lesion on the left hand, and it had lasted for sixteen years. The sister said that at the age of sixteen she had also had this same affection, involving the fourth finger on one hand and the third on the other hand, and that it had lasted for a number of years. Neither the mother nor the daughter had had any treatment, and the patient here presented had not had any treatment up to about four months before coming to him. In the middle nail the disease had passed beyond the lunula. The microscope showed mycelium and strings of large ovoid spores with bright centres.

The second patient was a lady of twenty-five years, in whom the disease had existed since the age of five years. She had had occasional treatment, but the disease had never been cured. In this case the microscope showed branching mycelia but no outlying spores. He had only seen the patient yesterday, and it was possible that the case was one of ringworm.

DR. E. B. BRONSON thought it unusual that the disease should begin at the proximal end of the nails.

DR. FORDYCE thought that in the early stages of favus of the nails the diagnosis could be made, but ordinarily it was difficult or impossible to differentiate ringworm, psoriasis, favus and eczema of the nails.

DR. ALLEN said that he had occasionally seen favus of the nails where there had been favus of the scalp. It was quite remarkable that several members of one family should have favus of the nails and recover without treatment.

Ringworm of Face and Chest.—Presented by DR. O. H. HOLDER.

The patient was a girl who had come to the New York University for treatment. She presented a number of circinate lesions on the face and body. He presented her as a case in which the ringworm fungus had caused an unusual number of lesions. Two other members of the family had developed ringworm. According to the history, this girl had been accustomed to hold against her face a kitten having some skin disease. The affection in this girl was only ten days old now. There were also numerous lesions upon the chest.

DR. MORROW remarked that it was the most precocious development of ringworm, so far as the multiplicity of lesions was concerned, that he had seen. Climate seemed to have a wonderful effect in developing a luxuriant character of growth. He had seen in Mexico and in Honolulu most remarkable and rapid developments of ringworm on the body. These abundant fugous growths were

very much like the extraordinarily luxuriant growths of plants in these parts of the world.

DR. ALLEN said that he had occasionally seen rather rapid dissemination of ringworm of this nature. He recalled the case of a lady who had come to him about fifteen years ago with rings all over the chest. Inquiry showed that she had a pet cat with some skin affection, and inspection showed the same disease in the cat.

DR. O. H. HOLDER said that under the microscope the case presented a very slender mycelium with external spore formation, but no clusters of spores.

Folliculitis Decalvans. —Presented by DR. GEORGE THOMAS JACKSON.

This was the patient who had been shown to the Society last March. He had been under his observation constantly ever since. At intervals a new crop of pustules would appear, and the hair would fall out. The whole scalp was now affected in patches.

Epithelioma and Lupus. —Presented by DR. C. W. ALLEN.

This patient, Mrs. M—, fifty-two years of age, had come to him in April, 1901, with an epithelioma involving almost one-half of the forehead. The patient was still under treatment, but the epithelioma element seemed to have been cured. There was also a lupus, which had begun twenty-four years ago. The lupus had been operated upon by Drs. Fox, Jackson and Ransom. He had treated the patient: first with caustic paste, and then with arsenical solutions, but later by electrolysis and the X-rays.

A Case of Lupus Erythematosus. —Presented by DR. H. H. WHITEHOUSE.

The patient was a man who had had the disease for eleven years. It had begun on the right cheek and had gradually extended to the scalp. The case was presented not so much because of its clinical appearances, but to bring out the question of treatment. The man had had all sorts of treatment, but wished now to submit himself to the action of the Roentgen rays.

DR. FOX said that his experience in curetting lupus erythematosus had not been very favorable. It was far more difficult to curette than lupus vulgaris. He would suggest that a good photograph be taken before beginning treatment with the X-rays, and then at various stages of the treatment, in order that a proper estimate of the value of the treatment might be made.

DR. E. B. BRONSON said that experience was opposed to the use of severe escharotics in lupus erythematosus. The strongest caustic that he uses in such cases is carbolic acid, and this sometimes seemed to do some good. As a rule, the more irritation the more the disease spreads.

DR. ALLEN was of the opinion that curetting constitutes the best possible treatment for lupus erythematosus. He had never seen the irritation referred to, and had been very much pleased with the results of curetting. The operation was not especially painful, and the tissue underneath the surface is rather soft. He often does nothing but curetting, though he prefers in the intervals to make free use of the calamine lotion.

DR. CHARLES T. DADE said that the experience at the Vanderbilt Clinic seemed to bear out what Dr. Bronson had said. Last spring a boy had come there with a new spot near the ear. It was curetted very thoroughly, and this spot had spread much more rapidly than the other portions. He would not care to use the curette again except where the disease is specially virulent.

DR. J. M. WINFIELD said that he had recently seen a case of lupus erythematosus that had been treated for eight months by the X-rays, receiving two or three

sittings a week. Apparently it had not been in the least benefited. He had then looked up the literature and had found that the results had not been very good, certainly not nearly so good as in lupus vulgaris.

DR. MORROW said that Mr. Morris, who had had an exceptionally large experience in the treatment of lupus erythematosus, had stated that he did not regard the X-rays as well adapted to the treatment of this affection.

DR. WHITEHOUSE said he agreed with Drs. Bronson and Dade that the milder the treatment the better the results. It should not be forgotten that many of these cases get well spontaneously. He had had three cases which had apparently recovered under the internal use of one grain of iodoform, three times daily.

Selections.

CUTANEOUS DISEASES.

On a Family Form of Recurring Epistaxis, Associated with Multiple Telangiectases of the Skin and Mucous Membrane.—WILLIAM OSLER (*Johns Hopkins Hospital Bulletin*, Vol. 12, No. 128, Nov., 1901, p. 333).

In the three cases described by the author, two belonged to a family in which epistaxis had occurred in seven members. Both of the patients had had bleeding at the nose from childhood, and both presented numerous punctiform angiomas on the skin of the face and of the mucous membrane of the nose, lips, cheeks and tongue.

The third patient had suffered in an usual degree from recurring epistaxis and the telangiectases were most abundant over the body and very numerous also on the mucous membrane. The condition has nothing to do with hemophilia, with which the cases had been confounded. This patient contrived a very ingenious arrangement to stop epistaxis. He took a rubber finger-stall about three inches long, into which was tied a small bit of rubber tubing with a stop-cock at one end. He inserted the finger-stall, relaxed, then put the tubing in his mouth, inflated it, and turned the stop-cock. He left it in for fifteen or twenty-five minutes and it stopped the bleeding entirely.

Angiomas have a curious relationship with affections of the liver. In cirrhosis, in cancer, in chronic jaundice from gallstones spider angiomas may appear on the face and other parts. They may be of ordinary stellate variety, like the stars of Verheyen on the surface of kidneys, or the entire area of the star may become diffusely vascularized so that there is a circular or ovoid territory of skin looking pink or purple, owing to small dilated venules. A dozen or more of these may appear on the trunk, or even large ones may disappear.

In a few cases of disease of the liver, the writer has seen large, mat-like telangiectases, or angiomas involving an inch or two of the skin, and looking like a very light birth-mark but which had appeared during the illness. The skin was not uniformly occupied with the blood vessels, but they were abundant enough on the deeper layers apparently to give a deep change in color and to form very striking objects. The dilated venules on the nose, and the chaplet

of dilated veins along the attachment of the diaphragm are not infrequently accompaniments of the spider angiomas in cases of disease of the liver. The writer saw the spider angiomas appear in the face in a case of catarrhal jaundice.

A Case of Dermatitis Gangrenosa.—T. M. FINNY (*The Dublin Journal of Med. Sci.*, 1901, p. 401).

Boy aged two and three-quarter years, when first seen was suffering from pustules of small size, not larger than a large pin-head, situated in the supra-pubic region, on the skin of the penis, and prepuce, wrists and backs of hands. In three weeks' time these pustules were converted into deep and wide ulcers, rounded base covered with pus—at the same time the destructive process was similarly progressing in the eyelids and cornea, a veritable panophthalmitis. There were no bullæ present at any time. There was no evidence to associate the eruption with either vaccination or varicella. The ulcers did not seem to be very painful or very irritable. The lower limbs were covered with an ill-defined rash, not unlike that of measles. The lips and margin of the alæ nasi were also sore and ulcerated. The child was greatly emaciated and had a cough; no physical sign of lung disease were discoverable. The post-mortem examination revealed general tuberculosis. The thymus gland was caseating; a caseous nodule existed in the apex of the right lung and similar patches through the left; the bronchial and mesenteric glands were caseous. The tonsils were ulcerated and the cervical glands enlarged and firm.

Cases of Purpura, Ending Fatally, Associated with Hemorrhage into the Suprarenal Capsules—E. GRAHAM LITTLE (*The British Journal of Dermatology*, Vol. 13, 1901, p. 445).

The cases reported by the writer are divided in three groups: Eleven cases of hemorrhage, into both suprarenal capsules, proving rapidly fatal, in which purpura was noted before death. In those cases, the following symptoms prevailed, which, according to the author's views, form a natural clinical group; a young child, usually in the later period of infancy, is apparently in normal health. He wakes up one night and is a little sick; he lies restlessly till morning, passes a loose motion or two and suddenly develops a purpuric eruption and becomes alarmingly ill. He is dead in twenty-four hours and there is no pathological feature of importance to be detected at the autopsy except gross hemorrhage into the suprarenal capsules.

(2) Two cases of hemorrhage into both suprarenals not associated with purpura, though the other clinical features and the pathological appearances bear a strong likeness to those described in the cases of the first group.

(3) Four cases of hemorrhage into one suprarenal body, proving more or less rapidly fatal, but not so rapidly as in the first group, and not associated with purpura.

The Histology of Soft Nævi.—G. JUDALWITSCH (Blaschko Poliklinik) (*Archiv f. Der. u. Syph.*, Vol. 58, 1901, p. 15).

In a very exhaustive article with appropriate clear drawings, the writer undertakes to solve two questions:

(1) Whether the nævus-cells are developed from epithelial or connective tissue cells, and (2) whether the connective tissue bundles originate from the connective tissue of the cutis, or from the nævus-cells themselves.

The nævus of a twenty-six year old patient, from the region of mons veneris,

existing since childhood and gradually growing, served him for the purpose of histological examination, with the following results:

(1) The cells originate from epithelial cells, and (2) the cells of the *nævus* form bundles of collagenous and elastic tissue, in other words, the epithelial cells change into connective tissue cells. During this transformation the epithelial cells undergo the following changes: Hyperplasia and pigmentation.

(2) Hypertrophy of the cells, followed by shrinkage of the protoplasm owing to the loss of the epithelial prickles.

(3) A shaving off of separate epithelial cells and deposition of same in the *cutis*.

(4) A gradual depigmentation and condensation of the protoplasm.

(5) Formation of polygonal *nævus*-cells with vesicular nuclei.

(6) New formation of connective and elastic bundles.

(7) Permanence of cells with vesicular nuclei lodged in the connective tissue bundles.

There is very seldom a chance to observe all the aforesaid stages of development of the cells of the *nævus* from the epithelial cells, as the growth of the *nævi* is repressed and checked very early and they are rarely examined in the earlier stages of their development.

In non-pigmentary *nævi* this observation is still of greater rarity, as the growth of the non-pigmentary *nævi* is arrested even earlier.

Regarding the new formation and spreading of the connective and elastic tissue bundles, they can be observed in any *nævus*, provided the examined *nævus* is in the stage of depigmentation. He accepts Kromayer's opinion that metaplasia takes place, the epithelial cells being changed into connective tissue cells.

The pigment cells play an important rôle in the formation of the *nævus*. Simultaneously with the appearance of the pigment, the hyperplasia of the epithelial cells takes place and only with the full formation of the *nævus*, the pigment disappears and the greater changes in the epithelial cells coincide with the presence of the largest amount of pigment; thus the metaplasia of the epithelial cells and the pigmentation are at their height simultaneously and when the change is complete a depigmentation of the cells takes place. [There is no adducible evidence of metaplasia between epithelium and connective tissue cells. Adult *nævi*, moreover, are not fit subjects for the study of histogenesis.—Ed.]

A Peculiar Affliction of the Skin of the Nose in Children (*Granulosis rubra nasi*).—T. JADASSOHN (*Arch. f. Derm. u. Syph.*, Vol. 53, 1901, p. 145).

The first case came under the author's observation in 1890, and since that time six cases more fell under his notice. The clinical aspect of the disease is as follows: On the tip of the nose and the nasal alæ a pronounced and sharply defined redness, easily disappearing under pressure is to be seen; upon this basis single papules of dark-red color are scattered. The papules are often very small, the size of the point of a pin and hardly raised above the surface; sometimes they are of a pin-head size and rather prominent; they are rather conical than flat, not arranged and not clustered. It is clinically impossible to determine whether they are localized in the opening of the sebaceous or sweat glands. They do not pale under pressure (no yellow brownish discoloration). There is no infiltration. Sometimes the papules will change into pustules, which quickly dry up. The skin of the nose is cold, telangiectesia is very little pronounced, sometimes entirely absent. No scaling and no scarring; only once

a very slight atrophy of the skin of the tip of nose has been observed. In some cases a slight hyperidrosis of varying intensity either of the nasal skin or the whole face could be seen. The course of the disease was a uniform one although the symptoms varied slightly; the redness was more or less pronounced; in one case being entirely absent, the papules developing upon quite normal skin. The papules themselves occur in large or in small numbers, and may be hardly noticeable. The localization upon the fleshy portion of the nose was always a feature. All his patients were children, six girls and one boy of between seven and sixteen years of age. The disease appears very early and lasts many years. The children were mostly of feeble constitution, but rather a hereditary, not personal, history of tuberculosis could be brought out. Injections of tuberculin failed to produce a reaction. The writer excludes lupus vulgaris and erythematosus, acne rosacea, hidocystoma, dysidrosis and tumors and is obliged to consider it as a "morbus novus nasi."

For histological examinations he obtained material from four cases and arrives at the conclusion that we have here to do with a chronic inflammatory process, which seems to start in the vessels, especially about the ducts of the sweat glands. The pus cells play a very insignificant rôle in this chronic inflammatory process, although they are met with when the process is in its acute stage.

The degenerative changes in the infiltration-cells are only slight—they never reach the stage of caseation. The very rare cells here are of no account. The disease is also histologically different from acne, lupus erythematosus and tuberculosis. The writer did not make inoculations, but he reports that Luithlen failed in his case with inoculations. Neither clinical observation nor histological investigation has thrown any light upon the question of the etiology of the disease. Up to the present time, the writer has not seen any cure in the cases, but it seems that the process has a tendency to disappear with time. He applied sulphur, resorcin, ichthyol, and many other applications used formalin in high percentage and cauterization, all with no beneficial results.

In an appendix, the writer considers the possibility of Luithlen's case (Kaposi's Festschrift, 1900. p. 709), being of the same category but in a more developed condition.

Five Cases of Nævi Cystepitheliomatosi Disseminati (Hidradenomes Jacquet, Darier, etc.)—A. GASSMAN (Jadassohn's Clinic). (*Arch. f. Derm. u. Syph.*, Vol. 58, 1901, p. 177).

The writer thinks he is entitled to the conclusion that the aforesaid tumors are of epithelial origin, as he was fortunate enough to produce a picture of a microscopic preparation where the direct connection between a cyst and epithelia by means of a cellular column is unquestionably demonstrated. Such a picture can be regarded as one of the greatest rarities, as out of one thousand serial sections examined by the writer, only in one, the aforesaid picture could be seen.

A critical review of the literature of the cases is included in the article.

The Etiology of Alopecia.—By DELOS L. PARKER (*Medical Record*, LX, 1901, p. 45).

According to the opinion of the writer alopecia is caused by a poisonous material (trichotoxin) absorbed by the blood from the air-cells of the lungs, where it has been elaborated by the decomposition of the organic material nor-

mally present in respired airs. In some individuals, whose breathing is of the superior costal type, respired air remains undisturbed in the upper portions of their lungs. The respired air contains organic material, which in the presence of warmth and moisture of the lung cavity undergoes decomposition, and a product is elaborated which being taken up by the blood exerts a selective poisonous action upon the growth of the hair and becomes the cause of alopecia.

In support of this theory the writer brings forth a statement that "A personal observation extending over a period of ten years and applied to thousands of cases, has never failed to give him ocular proof of the existence or non-existence of superior costal breathing, according as the individual under observation was or was not free from the form of alopecia under consideration."

To prove the correctness of this theory the writer made the following experiments upon animals. The respired air of a middle-aged man who had suffered from alopecia, was kept in warm and moist surroundings long enough for decomposition of its organic matter, and the substance resulting from this decomposition was injected into a medium-sized fox terrier dog and a large hen. After fourteen injections have been made a strip of bare skin about the size of the middle finger had appeared along the center of the posterior part of the abdomen of the dog, and one the size of the whole hand over the same part of the hen. After fifty-two injections the whole abdomen of each animal was bare, and irregular areas of uncovered skin extended upon the sides. These were symmetrically placed upon the two sides of the same animal.

In order to meet the objection that respired air from a man not suffering from alopecia and atmospheric air can produce the same effect, experiments were made with liquid which contained respired air (1) from a man without alopecia, (2) from a man with alopecia, with a liquid which contained (3) atmospheric air, (4) freshly respired air where no decomposition had occurred, and (5) distilled water. Only the pigeons treated with Nos. 1 and 2 showed patches upon the abdomen that were bare. The other pigeons treated with 3, 4 and 5 were unaffected.

A Case of a Primary Tubercular Ulcer of the Penis.—(Pospelow's Clinic.—M. A. TSCHLENOFF (*Archiv f. Derm. u. Syph.*, LV, 1901, p. 25).

According to the writer there is recorded only one case of a primary tubercular ulcer of the skin of an adult. This case, which occurred in the private practise of Prof. Pospelow, is the second one published.

The patient, 43 years old, was affected with an ulcer upon the glans and sulcus recto-glandularis of the penis, surrounded by an elevated, hard, irregular border, having in some places a punched-out appearance. The worm-eaten floor was covered with a tenacious, muco-puriform secretion; no miliary tubercles were noticed, no pain. Neither the lymphatic vessels nor the glands were swollen; and the skin did not exhibit any lesions.

Microscopical examination gave a classical picture of a tubercle. Only very few tubercle bacilli were found in the sections. No animal inoculation was undertaken.

The statements of the patient did not raise any suspicion of the existence of tuberculosis in his family. A thorough examination of the patient and his wife did not reveal any signs of tuberculosis or scrophulosis.

Alopecia Areata; a Clinical and Experimental Study.—By NORMAN WALKER and MARION MARSHALL ROCKWELL (*The Scottish Med. and Surg. Jour.*, IX, 1901, p. 12).

The authors carefully examined sixty-three cases of alopecia and made cultivations from a large number of the cases in order to determine either the parasitic or neurotic origin of the disease. The hairs from each case were examined microscopically. They were stained with Morris' modification of Gram's method, and organisms were found upon them; some of the hairs being sheathed with bacteria almost as closely as are the hairs in ringworm with fungus. In a large proportion of the cases seborrhea was observed.

The inoculated hairs gave a glistening white growth and the organism was apparently the *s. epidermidis albus* of Welch.

In two cases portions of the skin were excised and examined histologically. In both cases the organisms were found in the follicles and slight inflammatory changes in the epidermis and around the vessels were found. No organisms were found in the lymph spaces of the corium.

Several histories are given showing the occurrence of direct contagion. A table containing notes, concerning the duration, the extent of the disease, the contagion, the presence or absence of a history of ringworm and the presence or absence of nerve symptoms, is given to illustrate the point taken by the authors that the nervous element in this disease has been greatly overrated.

GENITO-URINARY DISEASES.

Clinical Report of a Second Series of Twelve Cases Benefitted by Bottini's Prostotomy.—RAMON GUITERAS, M.D. (*Medical Record*, Dec. 28, 1901, p. 1,003).

Guiteras reports another series of cases improved by this method of treatment. The results were gratifying. The contractile power of the vesical sphincters is not reduced by the Bottini operation, but on the contrary is increased, and the author knows of but one case in which incontinence appeared for the first time after the prostotomy. The amount of residual urine is reduced; and further, the patients are not always incapacitated sexually by the operation, as is usually supposed. As evidence the author mentions the case of a patient, 67 years old, who was operated upon two years ago. He was then suffering from severe urinary symptoms, and had six ounces of residual urine. Recently he presented himself for treatment for a venereal disease which he had contracted during intercourse. He felt himself cured of his prostatic trouble.

The best anesthetic in these operations is nitrous oxide gas, though ether was employed in most of these cases, for reasons not stated.

Of this series there were two classes of cases: Those who had suffered a long time, had considerable retention, and remarkably enlarged prostates, and those who had had attacks of retention, the prostate not much enlarged, as felt by the rectal touch, and the urethra not much elongated, though there was an impediment in the posterior portion. Enucleation should have been performed in the first class of cases, but the operation was not performed either because of the fears of the patients or the operator that they could not survive it owing to the damaged condition of the kidneys.

The second class of cases was suitable for the Bottini, and were properly

operated upon by it, with benefit to all but one. With this exception, all the patients said they felt better after operation, and in every case the amount of residual urine was diminished by quantities varying from two to seven ounces. Patients who could not pass urine at all, having suffered complete retention, were able to empty their bladders, with the exception of a few ounces.

A. L. W.

The Diagnosis and Surgical Treatment of Renal Tuberculosis.—F. TILDEN BROWN, M.D. (*Boston Medical and Surgical Journal*, May 30, 1901, pp. 513-520).

Brown emphasizes the importance of making an absolutely correct diagnosis in cases of renal tuberculosis. It is not enough to make a diagnosis of pyelitis, nephritis, or cystitis, but the etiology must be sought for. In urinary cases in general, urinary analysis should mean as careful a routine search for tubercle bacilli as is customarily given to the other formed elements of a sediment. When this is done, wholly symptomless cases of the disease will at times be discovered. Suspicion should be verified and the smegma bacillus excluded by getting the bladder urine through a catheter, and then by cystoscopic urethral catheterization, locating the lesion in the bladder or kidneys. The author's double-barrelled ureteral cystoscope is recommended as the most accurate and simple way of doing this in either sex. Especial care must be taken to eliminate the smegma bacillus from urinary specimens examined.

Sometimes the subjective symptoms are quite pronounced, even in the early stages of the disease. A dull aching in the lumbar region is significant; equally so a much more acute pain referable to the kidney or ureter. Occurring as crises, associated with nausea and vomiting, renal colic or gravel calculus is most apt to be thought of. Too frequent urination may be the first symptom.

Objectively the principal symptoms are a kidney which is larger and more tender than normal, as well as all grades of pyuria and hematuria, besides a just appreciable or well marked diurnal variation in temperature; loss of color and weight; a reaction to tuberculin; finally the presence of tubercle bacilli in the urine derived directly from one or both kidneys.

A great deal of value is placed upon the injection of tuberculin. This would be employed where a unilateral pyelonephritis was found in an individual giving some other suggestions of urinary tuberculosis, but at the same time running a nearly normal temperature. Should a fairly typical reaction here follow the injection, and could tuberculous foci be excluded from other parts of the body, the author would feel quite sure that guinea pigs inoculated by sedimental urine from this individual kidney would develop tuberculosis.

For the operation, if the heart is unquestionably sound, chloroform is the anesthetic preferred; otherwise nitrous oxide gas and ether.

During a nephrectomy for renal tuberculosis, if the ureter is found diseased down to a point below the first sacral vertebra, it is not always wise that total extirpation then, or at a later operation, be done. Observations tend to the inference that a considerable length of tuberculous ureter may be left with comparative safety, because after the removal of the diseased kidney, being in a functionless state of repose, this particular focus is amenable to curative systemic processes. If total removal, however, did not necessitate such an increased operative exposure, the radical removal of all affected tissues would better satisfy the surgical indications here, just as well as in dealing with any tuberculosis.

If a ureter is found diseased from kidney to bladder, it might be better to remove the lower half, giving the proximal half a temporary cutaneous implantation, there to drain the kidney until an early, favorable time for nephrectomy. In this way the services of both kidneys would be available in convalescence from one operation.

Before operation should efforts to ascertain the state of the kidneys be unavailing, then the epicystotomy done for drainage should be utilized to at once lead a small flexible ureteral catheter into each ureter mouth, whatever treatment is immediately afterwards to be given the tuberculous bladder lesions. Artificial illumination, like that of the electric headlight, is almost indispensable for the accomplishment of this procedure.

A. L. W.

A Case of Small White Kidney.—W. H. BRAZIL, M.D., D.P.H. (*Medical Chronicle*, Manchester, England, June, 1901, p. 187).

Brazil reports a typical case of small white kidney, which on account of its rarity is interesting: A boy, 15, was first seen suffering from edema of the feet and eyelids, frequent attacks of headache and sickness, and gradually increasing weakness and dyspnea. Ten years previously he had had scarlatina, without any evidences of acute nephritis. Eight years later, however, when under treatment for fracture of the thigh, the urine was found to contain albumin.

When first seen, had edema of the eyelids, chin and adjoining part of cheeks. No ascites. Pulse 88 and of high tension. Heart much hypertrophied. Urine, specific gravity 1016, acid, albumin one-half, no sugar. Subsequent examinations of the urine showed the following characters: Amount varied from 20 to 52 ounces per diem. Sp. Gr. varied from 1007 to 1015. Urea from 0.5 to 1.6 per cent. Amount of albumin varied from $\frac{1}{4}$ to $\frac{3}{8}$. Amount of serum albumin on one occasion was 0.175 per cent, while that of serum globulin was 0.025 per cent., giving a proteid quotient of 7. Hyaline and granular casts were found. With the ophthalmoscope, both eyes presented the most typical appearances of albuminuric retinitis and papillitis.

The patient gradually became worse, cardiac dulness increased, and he had several attacks of pericarditis. Urine became more scanty, universal anasarca appeared, orthopnea set in and he died in epileptiform convulsions six months after the writer first saw him.

On autopsy both kidneys were smaller than normal, extremely pale, almost white in color; surface irregularly contracted, producing a lobulated appearance. Capsule peeled off easily. On section, the cut surface was pale, and showed yellowish-white patches in places. No cysts. Cortex much atrophied, especially in places corresponding to surface depressions. Microscopic examination showed excess of fibrous tissue with degeneration of secreting structure everywhere. Convoluted tubules were empty or showed degenerated epithelium. Arterioles distinctly thickened.

Clinically the most noteworthy feature was the combination of the edema, pallor, and highly albuminous urine, characteristic of the large white kidney, with the cardiac hypertrophy and high tension pulse associated with the small red kidney.

Difference of opinion exists as to the origin of the small white kidney, many considering it to represent the last stage of the large white kidney. Others

contend for the essential unity of the small white and the small red kidneys, though the first view seems to be borne out by the evidence of the few cases reported.

A. L. W.

Primary Epithelioma of the Bulbous Urethra.—W. P. MONTGOMERY, M.A., M.B., F.R.C.S. (*Medical Chronicle*, Manchester England, June, 1901, p. 190).

The author reports the twelfth recorded case. The patient was 54 years old, no history of gonorrhea or syphilis. For last four months had gradually increasing difficulty in micturition, occasionally passing a few drops of blood before and after the act, while straining. For three months there had been a swelling in the perineum which had been growing slowly.

On examination this was a hard mass, two and one-half inches in its long antero-posterior diameter, and one inch transversely, apparently attached to the bulbous urethra. It could be felt in front through the scrotal tissues fixed to the corpora cavernosa and corpus spongiosum, and could be moved to some extent from side to side with them. The posterior limit was well defined in the perineum. Skin and subcutaneous tissues were somewhat adherent at the posterior limit. The skin itself, however, was unbroken, and showed no evidence of a previous sinus or fistula.

Per rectum, prostate was somewhat hypertrophied, though not more than might be expected at the age of the patient. The posterior limit of the tumor could not be made out, and the space intervening between the apex of the prostate and the tumor—the site of the membranous urethra—was certainly normal. There was no fluctuation over the perineal swelling. Patient was compelled to micturate every two hours, with nothing in the nature of a "stream." Urine was acid, contained a trace of albumin, but no blood.

No instrument could be passed. Passage of the sound was arrested at the anterior border of the tumor, and persistence was followed by free hemorrhage. Perineal incision was performed under chloroform for drainage of bladder, but that had no effect on stopping the growth of the tumor. There was no sign of abscess formation. At that time the possibility of the growth being a cancer occurred for the first time. A piece of the growth was removed and the diagnosis of squamous carcinoma was confirmed.

To remove the entire mass was impossible, for it extended in all directions. The perineal opening was kept in action.

Six months later the perineal surface of the tumor broke down, leaving a deep ulcer which discharged pus and blood. Patient was markedly cachectic. The perineum was soon replaced by a large cavity with irregular, bleeding walls, and almost large enough to admit a closed fist. The femoral vein became thrombosed, and the patient died exhausted eight months after he was first seen.

Sections made after death showed that the ulcer was atypical squamous-celled carcinoma; the root of the penis was involved in this growth with a sharp line of demarcation between it and the normal healthy penile urethra; the ulceration of the membranous urethra was limited equally sharply within a quarter of an inch of the apex of the prostate; the prostate and its urethra were not involved.

Clinically the tumor was to be differentiated from (1) carcinoma of one of Cowper's glands, (2) carcinoma of the prostate, (3) sarcoma. It was evident that the prostate and the membranous urethra were not involved.

A. L. W.

Syphilis as a Non-venereal Disease.—L. DUNCAN BULKLEY, M.D. (*Jour. Am. Med. Ass'n.*, April 6, 1901, p. 933).

Bulkley pleads in strong terms for the consideration of syphilis as a non-venereal disease, owing to the immense number of patients infected in a non-sexual manner. Legal restraint, through the action of health boards, is called for, as in other contagious diseases. If syphilis can become known as a non-venereal disease, it will not be so difficult to secure necessary legislation that will act as a protectant to the innocent.

The three great classes of "syphilis insontium" are, (1) marital syphilis, (2) hereditary syphilis, (3) extragenital, innocent syphilis. In the private practice of the writer, he found that in fully 50 per cent. of the women suffering from syphilis, the disease was acquired in a perfectly innocent manner, while among the married females the percentage of innocent infections would be 85 per cent. or more.

Of hereditary syphilis the aspect is darker. In the Moscow Hospital, Russia, of 2,002 births, there were 1,425 deaths; that is, 71 per cent. of the children born there of syphilitic parents died. From the standpoint of loss of population, this subject is worthy of the attention of government authorities.

It should be quite as criminal to transmit syphilis wittingly as it is to communicate smallpox, scarlatina or diphtheria. If syphilis can be included in the list of contagious diseases which the health boards can control, proper legislation will follow, as the profession and the public become more enlightened as to the real nature of syphilis and the real danger to the public from it.

A. L. W.

Some Observations in Renal Surgery.—W. H. ALLPORT, M.D. (*Jour. Amer. Med. Ass'n.*, April 6, 1901, p. 947).

Allport reports a number of cases in which errors of diagnosis and treatment were made. The paper is called a contribution to the natural history of error, and the writer claims as his apology for the paper, that we learn more from defeat than from victory.

Fourteen cases are reported. The writer summarizes the errors with which the cases seem to have been fraught as follows: 1. The surgeon should not attach too great weight to the recollections or the subjective symptoms of the patient, unless borne out by the physical signs. 2. On the other hand due weight should be given to statements made by intelligent patients, especially in cases where the objective testimony is abundant, but confusingly contradictory. Every legitimate opportunity should be offered the patient to establish a sequence of disease. The history taking should also be done with the greatest care. 3. It is an error in pathologic conditions to place too great reliance on relations normal to the healthy individual. No diagnosis of tumor or structure is complete until consideration has been given to the possibility of encroachment by organs or growths on the normal sites of organs, which *prima facie* evidence would lead us to believe to be the ones involved. 4. It is an error even in the presence of conditions which seem pathognomonic, to neglect every diagnostic resource, and to follow up each resource faithfully to its logical conclusion. 5. Among operative errors may be noted the failure to properly care for the ureter in two of the cases. The ureter should be ligated with catgut and brought separately into the wound after cauterizing with carbolic acid; or better still, should be inverted a short distance and stitched. Kidney stumps

should not be ligated with silk. Too deep incisions into the kidney structures are dangerous and jeopardize the subsequent integrity of the pelvis and ureter. The kidney and the operation wound should not be closed primarily after nephrotomies. Drainage for a few days at least is much safer and may save a subsequent nephrectomy. A kidney riddled with sinuses is best removed; conservative measures only lead to another operation. It is an error to base an incision on any preconceived idea of diagnosis; rather follow Tait's rule that "the kidney is best reached by the most likely route."

A. L. W.

Total Extirpation of the Prostate for Radical Cure of Enlargement of That Organ.—By P. J. FREYER, M.A., M.D., M.Ch. (*British Medical Journal*, July 20, 1901, p. 125.)

Freyer reports four cases in which he performed total extirpation of the prostate, with successful result in all. The age of the patients varied from 62 to 69 years, and in all of them the catheter had to be used for periods varying from six months to four or five years previous to operation.

Suprapubic cystotomy is first performed, and after nipping the mucous membrane covering the lobes of the prostate, the lobes are enucleated separately, or together, and then stripped off the urethra, which, with its enveloping tissues, is left intact. The ejaculatory ducts are left uninjured when the lobes come away separately, or the urethra is pushed beneath them. When the prostate comes away whole, it is not known what happens to these ducts, though at the advanced age of the patients this is not a matter of great importance.

In enucleating the prostate out of its sheath, the fibrous bands that pass between the sheath and the true capsule are torn through, but the prostatic plexus of veins and large branches of arteries are left behind, only the smaller vessels passing to and from the prostatic substance through the capsule being severed. This accounts for the trifling hemorrhage which takes place in this operation in comparison with the profuse bleeding which sometimes occurs in various forms of partial prostatectomy when the prominent parts in the bladder are cut, or torn off by forceps, the large veins and arteries being thus opened up.

The most remarkable feature of this operation, in the estimation of the author, is the complete restoration of the power of voluntary micurition after habitual catheterism had been employed for periods of time varying from six months to five years.

A. L. W.

Sexual Neurasthenia in the Male; a Plea for a More Accurate Use of the Term; Treatment of the True Forms with a Citation of Cases.—By RAMON GUITERAS, M.D. (*Medical News*, July 13, 1901, page 52).

Guiteras pleads for a more accurate use of the term sexual neurasthenia, and believes it should be restricted to those cases of neurasthenia in which a morbid condition of the genital apparatus exists, a condition which is demonstrated to be the source of the systemic disturbance, by the fact that its cure is quickly followed by the disappearance of the neurasthenia. A thorough examination of the urethral tract should be made in every case whether the patient calls attention to this tract or not, because the urethral symptoms may be masked by the general symptoms, or they may be absent altogether.

It is generally believed that the principal rôle in the causation of the neurasthenic state is to be attributed to the affections of the prostate, seminal vesicles

and spermatic cord. Enough prominence has not been given, the author states, to the urethra as the seat of the trouble in these cases.

The final proof of a correct diagnosis is the therapeutic test, and it has often been possible to correct the neurasthenic state by an intelligent application to the lesions in the urethra.

The treatment consists of the removal of the genital lesion and the eradication of the secondary effects. For the former the treatment of chronic gonorrhea and its complications is indicated. The source of irritation may be congenital or acquired. Among the former are a tight prepuce, partial or complete phimosis, small meatus or congenital stricture behind it, hypospadias or epispadias, and undescended testicle. Among the acquired are chronic urethritis, chronic prostatitis, chronic seminal vesiculitis, chronic epididymitis, and also varicocele, tumors of the prostate and of the testicle, traumatism of the genital organs, and defective innervation of the sexual center of the spinal cord. To these are also added contributing causes, as sedentary life, constipation, hemorrhoids, ulcer of the rectum, prolonged bicycle riding, onanism, masturbation, and above all, *coitus reservatus vel interruptus*. These contributing causes must cease to act if distinct and permanent benefit is expected to be gained by treatment.

In addition the general health must be looked after, especially by the use of exercise, baths, regulation of the bowels, massage, and regulation of the diet. Golf is the best form of exercise, sailing, fishing and horseback riding (with the proper kind of saddle) being also valuable. For office treatment static electricity has been of value and is recommended.

A. L. W.

Masturbational Neuroses.—By W. C. KRAUSS, M.D. (*Medical News*, July 13, 1901, page 58).

Krauss decries the tendency in certain quarters to defend the habit of masturbation and to champion those who practice it. He sees but two redeeming features in the practice: First, in this age of commercialism it is cheap and within the reach of all; second, it helps to fill the coffers of the otherwise needy and struggling physician.

The habit in certain cases acquires a power that is dominating and destructive to body and mind. The causes of this are either an innate morbid strength of the reproductive instinct, or much more frequently an innate morbid weakness of the controlling faculties, or a lack of the inherent brain stability, or an incapacity of inorganic repugnance to what is unnatural. These weaknesses are apt to occur in the children of neurotic families.

Heredity and temperament are undoubtedly the true explanation of the opposing statements that are made that the habit seldom does much harm, and on the other hand, that it is the root of most of the evils of boyhood, and that it ruins the health of those who indulge in it.

The habit seems to have an opposite effect upon the sexes, dulling the mental and making clumsy the physical exertions of the male, while in the female it quickens and excites the physical and psychical movements. The male is rendered hypoesthetic, the female hyperesthetic. The neurosis following is neurasthenia, the psychosis, hebephrenia.

Treatment must be directed to the removal of the practice, otherwise a cure of the functional neuroses is impossible. The prognosis in extreme cases is not bright, especially when coupled with a neurotic family history.

A. L. W.

The Preferable Method of Uretero-Ureteral Anastomosis.—By J. W. BOVEE
(*Journal of the American Medical Association*, July 27, 1901, page 254.)

Bovee discusses the various operations devised for suturing the severed ends of the ureter. The four different methods, end-to-end, end-in-side, end-in-end, and lateral or side-to-side, are discussed. The severed ends of ureters have been united thus far 33 times, without evidence of ureteral incompetency as a result. The side-to-side anastomosis has been done experimentally on animals, but it has probably never been done in man. The end-to-end, or the end-in-end methods are applicable in every case in which the other methods might be employed with a single exception. The reverse cannot be said. The end-to-end plan is preferable, with the end-in-end method next to it as the method of choice. With these two methods the surgeon should be able to repair any injury to the ureter, except of its very lowest part, involving a loss not exceeding three inches.

A. L. W.

A Statistical Digest of Epithelioma of the Penis.—By F. D. PATTERSON, M.D.,
(*University of Pennsylvania Medical Bulletin*, July, 1901, page 157).

Patterson concludes after an exhaustive review of the literature of this subject that epithelioma is by far the most frequent form of carcinoma of the penis, and that its frequency is about 2 per cent. of all cancers. Phimosis is a strong predisposing factor by causing chronic irritation, causing chronic balanitis or posthitis, or both. There is no record of a single case occurring among the Jews. As a rule epithelioma is more frequent after middle life, though this rule has its exceptions. One case is reported where the patient was but 22 years old.

The syphilitic virus has absolutely nothing to do with epithelioma, the scar of the old specific lesion being nothing more than an area of decreased resistance or a cause of chronic irritation. Traumatism is a predisposing factor by causing an area of decreased resistance. The question of the contagiousness of epithelioma is still to be decided. The growth usually begins in the glans or prepuce, and urethral origin is very rare. The symptoms vary with the location of the growth. Slight hemorrhage may occur, though severe bleeding is very rare.

Extension of the disease is either through the lymphatics or the cavernous tissues of the penis. The latter is rare; for the reason that the fibrous tissue sheath of the penis resists the invasion of the growth for a long time, becomes thickened, and as a result the epithelioma eats its way slowly. Visceral metastasis is very rare, though not unknown. The prognosis is favorable in the prestage if radical treatment be at once instituted; later it is only guarded. The only safe treatment in any stage consists in the thorough eradication of the diseased area, and of all lymphatic glands that are involved.

A. L. W.

Contribution to the Surgery of the Kidney.—By BAYARD HOLMES, M.D.
(*Journal of the American Medical Association*, July 20, 1901, page 172).

reports two cases of disease of the kidneys simulating gall-stones. The first case was that of a cystic kidney, in which the tumor made itself felt below the free border of the liver, and by pressure on the gall-bladder produced symptoms resembling those of stone. On operation the gall-bladder was found normal, but the diseased kidney was found and removed.

The patient, a woman 35 years old, made a successful recovery, and has been free from symptoms for more than a year and a half.

The second case was that of a movable kidney which also produced symptoms by pressure on the gall-bladder. Operation was performed, the gall-bladder found normal, and the kidney sutured to the posterior wall, with complete success.

A. L. W.

A Suggestion for the Treatment of Enuresis in Females.—By G. C.

PARNELL, M.R.C.S. (*British Medical Journal*, Jan. 11, 1902, p. 72).

Parnell advocates the employment of strong solutions of silver nitrate to the neck of the bladder and the urethra for this condition. By means of a probe covered with cotton wool, a solution of silver nitrate (30 grains to the ounce, gradually increased) is applied to the urethral canal, allowing it to remain about ninety seconds. Improvement is almost immediate, and is continuous if the applications are kept up for some time at intervals of three or four days.

In order that the solution shall come into contact with the entire urethral canal, the author has devised a small dilator, which permits of the application to every part of the canal.

Five cases are reported in which the remedy was applied with more or less success.

A. L. W.

Blood in the Urine as a Symptom, and the Diagnosis of Its Source.—By

JOSEPH WIENER, JR., M.D. (*New York Medical Journal*, March 9, 1901).

Wiener discusses this subject at great length, paying especial attention to the diagnosis of the source of the hemorrhage. Cystoscopy is of great value in determining this question, but its use is impracticable where there is stricture of the urethra, tendency to urethral sepsis, and profuse hemorrhage from the prostate or bladder. The ureteral catheter is not so easy, or so harmless, as cystoscopy, nor are the results so satisfactory.

The previous history is of importance, as is the age of the patient, and the time at which the blood appears in the stream of urine. In early life the hemorrhage may be due to stone in the bladder, tuberculosis of the prostate or of the bladder, some of the sequelæ of gonorrhea, sarcoma of the kidney, or a kidney lesion following one of the exanthemata. In adult life, urethral stricture and its results, stone and new growths in the bladder or kidney. In old age enlarged prostate, or a stone in the bladder, or sometimes cancer of the bladder. Blood coming from the urethra between acts of micturition is derived from the urethra. Fluid blood appearing at the beginning of the stream, comes from the prostate or deep urethra. A large amount of blood from the prostate may find its way into the bladder and become mixed with the urine. A clot in the beginning of the stream is from the urethra, prostate, or bladder. The same is true of that blood which appears at the end or toward the end of clear urination. Blood from the kidney is intimately mixed with the urine. In tumor of the bladder the hemorrhage is most profuse at the end of the stream.

Frequency and duration of the attacks and the effects of complete rest and exercise are important to note. In renal hematuria, or stone, and in movable kidney, the hemorrhage appears and disappears suddenly. After a short interval, a long thin clot may appear, followed again by profuse hemorrhage.

Chemically the relation between the amount of albumin and hemoglobin is of great importance in diagnosing the source of the hemorrhage. If there is a greater proportion of albumin than 1 to 16 of hemoglobin, it may be inferred that there

is albuminuria as well as hematuria, and that in all probability the hemorrhage is of renal origin. Microscopically the finding of many red blood cells showing the fragmentation first pointed out by Gumprecht is diagnostic of a renal source of the hemorrhage. In addition the finding of pus, mucus, epithelial cells, tuberculous material, portions of tumors and micro-organisms will be of value.

The various kidney lesions producing hemorrhage are also carefully discussed at length. The author prefers to make the diagnosis, if possible, without the use of instruments. Older methods should be followed before we fall back upon the newer ones.

A. L. W.

NOTICE.

Taking into consideration the fact that the general international medical congress will meet in Madrid in 1903, the International Dermatological Congress which was originally meant to take place that same year in Berlin, has been postponed till 1904 and will then meet in September, presided by Prof. E. Lesser. The general secretary of the congress is Dr. O. Rosenthal, Berlin.

JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

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No. 4.

Original Communications.

CANCER OF THE SKIN.

BY J. A. FORDYCE, M.D.,

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Hospital Medical College.

CANCER of the skin is at times characterized by certain definite features, which differ radically from those met with in malignant growths of the mucous membranes or the viscera.

It is often relatively benign in its course, frequently multiple in its manifestations, and sometimes preceded by precancerous epithelial changes of indefinite duration.

There is little tendency to tumor formation in certain varieties of cutaneous cancer; the new growth is of so unstable a character that it undergoes ulceration almost as rapidly as it forms. It is this predominating characteristic that gave rise to the designation of rodent ulcer before its true nature was understood. The absence of lymph-node infection and general metastasis in the rodent ulcer type of epithelioma, together with certain peculiarities of structure, justify the view that has long been held that we have to do with a distinct clinical type of new epithelial growth.

It would not be surprising were subsequent investigation to show that there are distinct varieties of the cancer organism, as in malaria and other protozoan infections.

Epithelial proliferation from the epidermis or its appendages may reach a certain development, and then remain stationary for months or years; the constituent cells undergo degeneration and cease to grow until subjected to an external stimulant, like prolonged irritation of

slight intensity, a more active traumatism or to some unknown influence. We see this illustrated almost daily in the small, pearly gray nodules, which are so often seen on the faces of middle-aged individuals.

FIG. 1.

A small pearly nodule of fifteen years' duration was scraped away two years previously. Since that time the present condition developed.

When spared from improper interference or irritation, they remain stationary for an indefinite time.

If imperfectly removed, or irritated by the application of mild caustics, which stimulate without destroying all the implicated tissue, they may take on a rapidity of growth which is appalling.

The case portrayed in the accompanying illustration (Fig. 1) exemplifies the statement just made. For fifteen years the patient was little troubled with a small nodule on the cheek. Shortly after it was curetted, however, it began to grow with great rapidity until it destroyed the wing of the nose, a portion of the lower lid, and extended for a considerable distance within the nasal cavity. Rodent ulcer, while

FIG. 2.

Rodent ulcer of eleven years' duration which began as a warty and encrusted lesion on the cheek. It shows extensive ulceration and little new growth.

so insignificant and apparently so benign an affection in its early stages, results at times in even more disfigurement than the most destructive forms of syphilis or lupus.

In its local progress it implicates slowly but certainly all the tissues which stand in its way. If, as sometimes happens, the new epithelial growth is destroyed in the ulcerative process, cicatrization in one part of the ulcer takes place as it spreads in other parts.

In its serpiginous extension and tendency to spontaneous healing, rodent ulcer is analagous to both lupus and late syphilis. Several cases have come under the observation of the writer in which rather extensive rodent ulcers have almost completely cicatrized by reason of the destruction of the new growth by ulceration. This happy termination is exceptional, and only occurs when the patient is fortunate enough to escape the improper methods of treatment so much in vogue.

The implication of the soft parts, together with the underlying bone, is shown in the photograph (Fig. 2). In this patient the curette had been frequently employed with the usual result of rapidly spreading the destructive process.

FIG. 3.

Epithelioma of the lip in which the new growth is in striking contrast to the condition met with in rodent ulcer.

The histological study of rodent ulcer shows that the new growth of epithelium infiltrates deeply, and cannot be reached by the curette alone. When seated about the eye or nose, more radical surgical methods are equally powerless to prevent recurrences in long standing

It is in this class of cutaneous cancers, which are beyond relief by other methods of treatment, that such brilliant results have been attained by the Roentgen rays, and we seem at last to have an agent capable of effecting a cure.

In marked contrast to rodent ulcer of the face, in which little tendency to tumor formation is met with, cancer of the lip often leads to considerable new growth before destructive ulceration takes place. It is seldom, however, that we see such a protuberant mass without ulceration as the one shown in the photograph (Fig. 3).

The cell growth in cancer of the lip, instead of reverting to the embryonic type, as in rodent ulcer, tends to develop in the direction of the

adult type of cell, giving rise to irregular and imperfect cornification. In the growth shown in Fig. 3 the surface of the tumor is covered by a thickened and abnormal horny layer.

The clinical course of cancer of the lip differs from that of rodent ulcer in its greater rapidity and, in all cases, sooner or later infecting the lymph nodes. No good reason has been advanced why the lymph

FIG. 4.

Spencer 1 in. Compensation ocular 4. Zeiss.

Rodent ulcer of the face showing sclerosis of the connective tissue between the small pointed epithelial processes.

nodes are not invaded in rodent ulcer, unless it is owing to the greater resistance interposed by the connective tissue, with which the skin is so liberally provided. That they may exceptionally become involved was shown in a case which recently came under the writer's observation. A patient, aged sixty years, presented a typical rodent ulcer of ten years' duration, on the side of the nose, extending to the inner canthus. He

had at the same time an epithelioma, with identical clinical features, behind the ear, which had been subjected to an imperfect operation, and had resulted in a relapse in the scar tissue (Fig. 4). The lymph node over the mastoid process was enlarged, and, after excision, was found to be invaded by typical embryonic epithelial processes (Fig. 5), which could not be distinguished from those in the derma.

FIG. 5.

Spencer ½ in. Compensation ocular 4. Zeiss.

Rodent ulcer of lymph node showing the same type of epithelial growth as in the skin.

The exceptional situation of the epithelioma in this case, when the integument is thin and the relapsing growth was subjected to pressure against the underlying bone, was probably the factor which determined the invasion of the lymph node in the immediate proximity.

The writer has confirmed certain observations made by Fabre-Domergue¹ that the malignancy of epithelial cancers depends rather upon their structure than their location. We are able, in a general

* "Les Cancers Epithéliaux," Paris, 1898.

way, to arrive at certain conclusions regarding the relative malignancy of cutaneous cancers from a histological study of their structure and the manner of their cell growth. The lowermost layer of the epidermis and the outer root sheath of the hair follicle are separated from the derma by a stratum of columnar cells, which have the same relationship to certain cutaneous cancers that the basement membrane of glands has to carcinomas starting in these organs. An intact basement membrane prevents the proliferating glandular epithelium from infecting the surrounding tissue so that we have an adenoma-like growth before a carcinoma.

In like manner a keratoma or an acanthoma may precede a carcinoma of the skin, and many transitional forms may be encountered between the typical benign tumors and the fully developed cancers.

When epithelial buds are detached from their parent tissue they are often found with a layer of perfectly developed columnar cells, which seem to protect the surrounding tissue from infection. The writer in numerous instances has excised small growths from the skin, and has found all the growing masses or tubules of epithelium surrounded by a typical basal layer. In these cases little reaction takes place in the connective tissue, and further observation has shown the growths to be comparatively benign. On the other hand, when this layer of peripheral cells is absent, the epithelial proliferation goes on without order, leads to more active reaction in the connective tissue and to deep infiltrating carcinoma. In rodent ulcer the tendency of the new cell growth is to revert more and more to the embryonic type of cell, while in the squamous-celled cancer the adult form of cell is produced. The pearl bodies here enclosing stratified, horny matter correspond to the epithelial masses in rodent ulcer, and both types of new growth may remain comparatively harmless while retaining their outer layer of protecting cells.

It is possible, therefore, to say, after a histological examination that we have to do with a malignant or a relatively benign type of growth from the presence or absence of the peripheral layer of columnar cells about the epithelial proliferation, and from the amount of reaction present in the surrounding tissue. It is, however, unsafe to make any prediction as to the probable duration of such protection.

In squamous-celled epithelioma giant-cells are sometimes encountered which have been interpreted as due to the intrusion of foreign bodies or to degenerated epithelial cells, which act as foreign bodies.

Buxton¹ regards such an origin as the most probable, and shows an excellent photograph of a large myeloid giant-cell, enclosing a horny

* JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, Vol. XIX., p. 1, 1901.

epithelial pearl. Pseudo giant-cells are met with in transverse sections of epithelial invasion of the lymphatic spaces, where the protoplasm of several cells undergoes hyaline degeneration and fusion. The preservation of the cell nuclei in these masses simulates giant-cells in a striking manner, as is shown in Fig. 6.

The origin of all giant-cells in epithelioma cannot be explained by the presence of foreign bodies, or by the fusion of adjacent cells.

FIG. 6.

Spencer ¼ in. Projection ocular 2. Zeiss.
Pseudo giant cells in squamous-celled epithelioma.

In Fig 7, large hyaline cells are seen, which contain nuclei of uniform size and appearance; these nuclei are like the cell infiltration in the surrounding connective tissue, and are probaly lymphoid cells which have invaded the hyaline masses. In other portions of the same tumor epithelial cells in various stages of degeneration are seen to be invaded

size and appearance (Fig. 8).

oe of growth is at times simulated by epithelial pro-
 n the epidermis or hair follicles, which may cause us
 r to have a glandular origin.

s found in acanthoma adenoides cysticum (multiple

benign cystic epithelioma) as well as in single tumors presenting different clinical aspects.

It is a relatively benign type of epithelioma, with apparently little local or general infecting power.

The adenoma-like structure, to which reference has just been made, is seen in the accompanying photomicrograph (Fig. 9), which was made from a section of an epithelioma that developed in connection with

FIG. 7.

Spencer ¼ in. Projection ocular 4. Zeiss.

Large giant cells in squamous-celled epithelioma containing multiple nuclei resembling lymphoid cells.

psoriasis. The broad epithelial processes and acinus-like collections of cells are surrounded by an intact columnar layer and separated by little connective tissue stroma. It would be safe to infer from the histological structure of this tumor that we have to do with one of very slight malignancy, and this opinion is confirmed by the following history of the case, kindly given me by Dr. George T. Jackson:

Epithelioma; Psoriasis; Verruca Senilis.—General S., æt. 73, in fine general health, and vigorous, both mentally and physically.

Examination shows four well developed, ulcerated epitheliomas upon his trunk, one being located posteriorly on shoulder, and three upon

his chest anteriorly. He has also three or four patches on trunk, bearing all the clinical signs of Paget's disease, one of which is about the right nipple. He has also many senile warts, and a chronic eczema over both shins. Scattered about trunk and extremities is a sparse eruption of psoriasis of chronic type, which antedated the epitheliomas.

Course of Epitheliomas.—Patient states that he has had the epitheliomas for thirty years. Eight years ago the largest one on shoulder appeared. This is now a large encrusted ulcer, with elevated, rolled edges, irregular in shape, and some four or five inches in diameter.

FIG. 8.



Spencer ¼ in. Projection ocular 4. Zeiss.
Epithelium invaded by lymphoid cells.

The large one on shoulder was removed by the knife, Dr. B. F. Curtis operating on January 10, 1898. On February 13th, of the same year, I removed another epithelioma on chest with arsenical paste.

The patient was seen in October, 1901. There was no sign of a relapse in either epithelioma.

The histological examination in the foregoing case showed the growth to be of the benign type, rather sharply circumscribed, and with no tendency to deep infiltration. The clinical course of the tumors supports, in a striking manner, the conclusions drawn from the microscopic picture.

We may conclude from certain of the foregoing observations that epitheliomas of the skin differ widely in their structure and in their power to produce general infection. The value of comparative methods of treatment without regard to the type of new growth is rather difficult to estimate. Circumscribed, non-infiltrating epitheliomas are readily cured by excision or caustics, and show little tendency to recur. On the other hand, chronic, infiltrating, rodent ulcers recur quite as often after

FIG. 9.

Spencer 1 in. Compensation ocular 4. Zeiss.

Epithelioma of the skin in connection with chronic psoriasis. Epithelial new growth like that in benign type of epithelioma. Little change in connective tissue.

excision as after the use of the curette and suitable caustics. Curettage alone, without the subsequent use of active caustics, like arsenic or chloride of zinc, spreads the growth by opening the lymph vessels and more readily permits absorption and dissemination of the cancer cells. Caustics destroy the cell growth which is beyond the reach of the curette, and if repeatedly used when the slightest recurrence shows itself many infiltrating epitheliomas may be radically cured with less destruction of tissue than by the purely surgical methods. It is in this class of cases (chronic infiltrating rodent ulcers) that such brilliant results have been attained by the Roentgen rays.

66 Park Avenue.

TWO CASES OF BLASTOMYCETIC DERMATITIS, ONE
OF WHICH WAS CURED BY IODID OF
POTASSIUM.*

BY FRANCIS J. SHEPHERD, M.D., C.M.,
of Montreal.

I WISH to place on record before this Association notes of the two following cases of blastomycosis which have already been exhibited several times to the Montreal Medico-Chirurgical Society.

Jas. S., æt, thirty-eight, married, came to the dermatological clinic at the Montreal General Hospital in the month of March, 1900, with considerable ulceration of the face and nose. The disease began seven months before (August, 1899) as two small papules on the right ala of the nose. The papules were hard and flattened, of a pale red color, and, he says, never became pustular. Gradually these papules enlarged into tubercles, the lower one spreading downward and the upper one outward. The skin over the area which the growth invaded became raw and ulcerated, the ulceration going deeply and destroying the right ala nasi and part of the upper lip. The edge of the ulcer was red and inflamed with a gray sloughy base, and small abscesses appeared at intervals, and this ulceration caused him considerable pain. The ulceration gradually extended until it involved both cheeks, the whole nose, and part of forehead and upper lip.

When I saw him first both alæ nasi and part of the upper lip were destroyed by ulceration and on both cheeks continuous with the nose was a large, bat's-wing shaped scar with a raised ulcerating edge. At the right and lower edge of the eruption the ulceration was still extending and here there was much reddening and thickening with intervening patches of ulceration. Irregularly over the scar area were scattered small ulcerations from the size of a grain of wheat to the size of a large pea.

The patient had always been a healthy man, never had syphilis and shows no signs of it anywhere; has several children, all perfectly healthy, and wife never had a miscarriage. I saw the children and wife and they all were quite healthy; there is no history of tuberculosis. He had been treated with tuberculin on the supposition that the disease was lupus at one hospital for a month, but no reaction or bene-

* Read before the American Dermatological Association.

fit resulted. At another hospital he was etherized several times and the parts scraped with a sharp spoon and afterwards cauterized, but this treatment had no effect in checking the spread of the disease.

When I saw him I suspected blastomycosis from his appearance, and had cultures taken, but unfortunately they were mislaid; I also removed some of the tissue, and Dr. Wyatt Johnston, who examined it, said he found yeast buds; his report is appended. The patient was

FIG. 1.

Case I.

put on large doses of potassium iodide and rapidly improved. He previously had had mercury and small doses of iodide without effect. I did not see him for nearly a month, when he came back much improved; the ulceration had ceased spreading, and in every way he was better. When last seen, in September, 1899, he was practically well.

The second case, M. D., a French Canadian, æt. seventy-two, a laborer, came to the dermatological clinic at the Montreal General Hospital May 14, 1900. He has always lived in the Province of Quebec; married, and has had children, all healthy; no history of venereal dis-

ease of any kind; no tuberculosis in family, or any disease that he knows of. Three months before patient noticed a red blush over the right cheek, and in three or four days the whole right cheek was red and inflamed and soon afterwards a nodule the size of a pea appeared in front of the right ear. Other nodules appeared from time to time over the right cheek and right side of the nose. These nodules soon became pustular and later the surface became covered with thick crusts. The pustulation and crusting gradually extended until it involved the whole of the right cheek, right ear and right side of nose. Never has been painful or very itchy, except at first.

His condition on entering the hospital was as follows: Fairly nourished old man of seventy-two; no evidence of syphilis, but over left sterno-mastoid were two scars as if from the suppuration of tuberculous glands. He says these scars are very old. Over right side of face the skin is red, shiny and smooth, showing existence of previous ulceration. In this shiny skin are several areas half an inch in diameter which are raised above the skin, pustular and covered with crusts. The right ear is much infiltrated and part of the lobe has disappeared; there is also considerable scarring in front of the ear and over temporal region, which has destroyed the hair. Below the ear and in the ear are a number of pustules covered with scabs from which a purulent secretion exudes. Just in front of the upper part of the ear is a more superficial area of pustulation the size of a fifty-cent piece. The nose is covered with a group of pustules and scabs and the right ala has been almost completely destroyed. There is ectropion of the right eye, due to the contraction of the scar tissue of the cheek. Over part of the upper lip the hair has been destroyed and the skin here is covered with scars and there is some contraction. Cultures were taken and pieces of tissue removed and given to the pathologist.

The diagnosis of blastomycosis was suspected from the first, cultures were taken and pieces of tissue excised, and the patient was put on gr. xx. Pot. Iod. t.i.d. In a week there was decided improvement, the crusts were clearing off the nose; there was less pustulation, and many ulcerated spots were healing. In a month of continued treatment by iodide of potash, much improvement resulted; the pustular nodules had almost all disappeared from the cheeks and nose, leaving a shiny scar behind. On the side of the nose and about the ear some pustules with crusts remained. Dr. W. Johnston's report on specimens removed showed the budding pustules with double contour.

For some time the patient was lost sight of, though searched for everywhere, his name being a common one and the address he gave not existing, but on October 22, 1900, he came back to the hospital for

treatment in a much worse condition than when he left, though not so bad as when he first came under observation. He said he had been in the country, but it transpired afterwards that he had been an indoor patient in another hospital during the whole summer. I could not make out in what manner he was treated. He was again put under in-

FIG. 2.

Case II.

creasing doses of potassium iodide and rapidly improved; at one time he took one drachm three times a day without inconvenience, given in largely diluted form. By December he was nearly well, and when discharged from hospital on January 22, 1901, he was practically well, the only trace of the former disease being the scarring and a small

opening in front of the ear, which was the remains of what had been a fairly large abscess, and a small scab under right lower eyelid.

The cultures in this case at first showed nothing but staphylococcus aureus and then, after a week, the characteristic fungus of the blastomycetes appeared.

The following are the reports of Dr. Wyatt Johnston, Pathologist to the Montreal General Hospital, on those two cases:

Case I.—Jas. S., æt. thirty-eight, Dr. Shepherd, April 23, 1900. Portions of skin excised and cut by freezing microtome after hard-

FIG. 3.

FIG. 4.

Case II.

After one month with iodid.

At time of discharge.

ening in formalin. The sections showed a heaping up of squamous epithelial cells with some cell nests; the intervening connective tissue is highly vascular and shows infiltration by numerous leucocytes but no definite miliary abscesses. Sections stained by eosin and methylene-blue show budding cells without definite double contour, but it cannot be definitely determined whether these are cell inclusions or blastomycetes forms—only a few are seen.

The material was not received in suitable condition for culture. No further material was received.

Case II.—M. D., æt. seventy-two, Dr. Shepherd, May 16, 1900. Examination of pus from a small abscess in the cheek shows some

peculiar ovoid bodies not like ordinary leucocytes but not characteristic of blastomyces.

Sections of skin removed and imbedded in paraffin after hardening, show decided hyperplasia of the squamous epithelium with several distinct cell nests. In the deeper part of the cutis and in the subcutis are miliary abscesses which in the center show two budding objects with double contour and vacuolation. The structure (as shown in the photograph by Dr. Patrick) corresponds exactly with the bodies figured by Gilchrist; the size is 15 to 18 microns. These are not adjoining any of the larger cell forms, but are situated in the center of the abscess and surrounded by leucocytes only.

Cultures on serum showed only staphylococci at first, but on the fourth day flat white colonies appeared, which showed microscopically the characters of blastomyces with typical budding and formation of small groups. These are mingled with bacillary forms, suggesting an impure culture. They grow best on media containing sugar and on agar form a diffuse whitish growth extending between the media and the tube. The size is smaller than the common blastomyces, not exceeding 4 to 6 microns in diameter, but corresponding with the smaller form as figured by Hektoen.

A CASE OF LITHOLAPAXY UNDER COCAINE.*

BY G. K. SWINBURNE, M.D.,
Surgeon to Good Samaritan Dispensary.

THE specimens which I have to present were removed from a patient at the Good Samaritan Dispensary under cocaine; as it happened, there were two operations, a month apart. After each operation, the patient walked home.

The patient was a man sixty-two years old when he presented himself, in May, 1901. For five months he had been suffering from frequent and painful urination by day, not so frequent at night; sometimes there was blood in the urine. The urine was very cloudy. Just before he presented himself he was passing water every fifteen minutes to half an hour during the day, and every two hours at night.

An examination with the Thompson searcher revealed the presence of calculus in the bladder. I placed the man on urotropin, 7½ grains, three times daily, which he took all the time he was under treatment,

*Read before the New York Society of Dermatology and Genito-Urinary Surgery, Jan. 10, 1902.

and treated his bladder locally for two or three weeks, hoping to get him in better condition before resorting to operation. During that time I noted that his urethra was quite tolerant to urethral instruments, and the idea occurred to me that in his case a litholapaxy could be successfully performed under cocaine. With this end in view, I proceeded to accustom him to the manipulations he would have to go through with when I came to perform the operation. At each visit, twice a week, after washing out the bladder with a sterile saline solution, I would leave some of the fluid in the bladder, then insert the lithotrite, and grasp the calculus. The first time I did this I discovered, on rotating the calculus caught in the jaws of the lithotrite, that it could be made to strike against another calculus, whose presence had not been made out before. After releasing the calculus and removing the instrument, a No. 22 F. evacuating tube would be inserted into the bladder, to which was then attached a Chismore evacuating bottle and bulb, filled with the saline, and I would then go through the manipulations used in evacuating and washing out the fragments. This series of manipulations was repeated at nearly every visit, twice a week, without even cocainizing the urethra, and the patient in this way became used to having it done. The performance was done as gently as possible, the only discomfort to the patient being the sudden filling and emptying of the bladder while pressing and releasing the hand-bulb of the evacuator; it never was followed by any reaction. After removing the evacuating tube, a soft rubber catheter would be inserted, the fluid in the bladder removed, and half an ounce of a two-per-cent. solution of protargol injected and left in the bladder while the patient returned home.

This maneuver was done for three or four weeks, usually twice a week. The urine became somewhat clearer, and the patient was rendered rather more comfortable, and his frequency was somewhat, but not markedly, reduced.

Early in June I attempted the operation. After first washing out the urethra and bladder with a catheter, the catheter was withdrawn till the eyes was just within the posterior urethra, and six drams of a two-per-cent. solution of cocaine slowly injected through the posterior urethra, into the bladder and left it there. Then I injected a syringe of the cocaine into the anterior urethra, and made the patient hold it while the instruments were being made ready—about ten minutes. After everything was ready, I half filled the bladder with a sterile salt solution, warm.

Unfortunately, I began the work of crushing with a small Bigelow lithotrite, and the operation went more slowly than I had anticipated.

Finally, the instrument became jammed, after I had been at work for half an hour. This instrument was then removed, and, with a larger instrument, a medium-sized Keyes, I very quickly reduced all the broken fragments of one calculus sufficiently to remove them with the Chismore evacuating bottle, using for this purpose a No. 22 curved and a No. 29 straight evacuating tube. The whole manipulation had taken three quarters of an hour, and, as the influence of the cocaine had worn off, and believing that I had removed all the fragments, I left the remaining calculus for another sitting. The patient had suffered no unusual pain, had borne the operation well, so he was sent home, and told to remain in bed for forty-eight hours. I made two visits during that period at his home, one of my assistants also seeing him that evening. There was no reaction following the operation, and after the patient was up he thought he was more comfortable than before the operation.

During the next four weeks I again treated the bladder in the same way as before the operation. During that period the patient brought me several small fragments that he had urinated out in the meantime, showing that I had not thoroughly evacuated all the fragments. I believe that the presence of the other calculus prevented this.

The first week in July I repeated the operation in the same manner, removing the second calculus. At this operation the medium-size Keyes lithotrite was used, and the crushing and evacuation of fragments occupied about half an hour, and all the fragments were removed before anesthesia from the cocaine had worn off.

After the second operation the patient did not go to bed, as he was told to do, but remained up and about the house. No reaction followed the operation. After forty-eight hours he had no discomfort on urination, and by the end of the first week the urine had become perfectly clear and the intervals of urination perfectly normal. He expressed himself as feeling perfectly well.

The fragments of the first calculus, after drying, weighed 215 grains, the second weighed 285 grains, so that the combined weight was 500 grains. The calculi were hard, and apparently of pure uric acid.

The patient made the statement that he never would have allowed a cutting operation to be performed.

He had remained away the rest of the summer, feeling perfectly well, but, October 30th, he again presented himself, having for about two weeks been suffering again from pain and frequency of urination. His urine was again slightly cloudy. With the Thompson searcher I could detect nothing, but with the evacuator and the 22 F. curved tube

I quickly removed a small uric-acid calculus, weighing, when dry, exactly two grains. Whether this is a new calculus or one having formed around a minute fragment left from the previous operation I am unable to say, though I believe the former to be the case, for he had had no symptoms for three months. Furthermore, repeated washings of the bladder following the last operation never brought any fragments.

At about this same period, May, 1901, I had another patient, a man sixty-five years old, suffering from calculus, whose urethral canal was so sensitive, and the patient made so much disturbance even at the passage of the searcher, that no such manipulations as were done with the first patient could be done with him. He readily consented to operation under chloroform, which was done at his home, in a tenement, and a small uric acid calculus was quickly crushed and evacuated.

[Since this paper was read, January 10, 1902, the first patient has again presented himself, March 4th, saying that for two weeks he has had a return of his frequency, which was every hour during the day and every three hours at night, but there has been absolutely no pain, and the urine passed in my presence was absolutely clear. The searcher again revealed nothing, but the evacuating bottle brought out numerous minute grains of uric-acid sand. It is perfectly evident to my mind that this man is secreting uric-acid crystals, which form from time to time, and, had a cutting operation been done, he would again have formed stone. As it is, he can be kept free from the formation of calculi by frequent bladder washings, a thing that could not have been avoided by the performance of lithotomy, and he has a bladder without a cicatrix. He did not have to spend a month in bed following such an operation, and his position, to my own mind, is a better one than if he had undergone such an operation. He has no prostatic enlargement and no residual urine, as I have repeatedly examined him to make sure of this point.]

Book Reviews.

Hautkrankheiten. A. NEISSER and J. JADASSOHN, 1901.

This volume is a reprint from the Ebstein-Schwalbe "Handbook of Practical Medicine." Its aim is therefore usefulness to the general medicine man in German lands, but it contains far more than he will ever digest if one may judge by his American colleague. Much abuse has been heaped upon the dermatologist who sees nothing within the skin—it is about time someone with Prof. Neisser's position turned his batteries on the practitioners who neglect it utterly. That is the burden of his "Afterward;" from the character and place of the work, most apposite. As Dr. Jadassohn was for a long time Assistant to Prof. Neisser, although he is now located in Berne, this may be regarded as the official announcement of the views held by the Breslau coterie and as such has an added interest. The output of the school has long been held in high esteem; it is real praise to say that there is nothing here to lower the earlier estimate.

The great fault with the volume is that there is no index. There is a table of contents (typewritten) with reference pages, but it does not list all of the diseases considered, necessarily. At times the reader has a rare hunt for a disease. Alopecia areata, for example, cannot be found in the contents, but it may be discovered with other alopecias under hypotrichosis. The classification is no better or worse than others. The authors naturally class individual affections where it seems best to them, and make new divisions where they please. Lupus erythematosus, which is recognizable as "erythematodes," has a separate place with ulerythema under the heading, Atrophic Inflammations (properly inflammation ending in atrophy). Seborrheic dermatoses, so far as seborrhea sicca and seborrheic alopecia go, have a division entirely to themselves. The authors do not accept Sabouraud's conclusions as regards alopecia areata or his other seborrheic affections, although they give full consideration to his views. The work has been divided nearly equally by sections, the name being appended, but there is no overlapping and no divergence of view.

Chief interest in a new work attaches to moot questions and the reviewer naturally turns to them at once. There is evidently no trace of the influence of Vienna, so far as concerns the lichen controversy. Duhring's name is writ large over dermatitis herpetiformis, which is frankly held to be a vasomotor neurodermia. The claim for Tilbury Fox's priority with hydroa is allowed, but full honors are rendered to Duhring for his classic exposition. Mycosis fungoides is classed with the leukemic affections and blood changes in skin disease for no apparent reason since no evidence is brought to show that the infiltration is leucocytic. The vexed question of tuberculide Neisser passes over, saying that he cannot see its importance and that the claim that various affections such as lupus erythematosus, eczema and the necrotic lesion are exanthems of tuberculosis needs confirmation. Jadassohn's chapter on new growths is most interesting, but his considerations of sarcoma and epithelioma are incomplete. Under epithelioma, he mentions only rodent ulcer and Paget's disease, which is not related to epithelioma in any way. By long, long odds, the most startling find in the book is psoriasis, the lichens, pityriasis rosea under *dermatomycoses* when the authors unhesitatingly admit their etiology is unknown.

There is appended to each subdivision a bibliography of selected, recent literature in which it is pleasing to note the frequent occurrence of American names, a thing generally conspicuous by its absence in German works. There is no publishers' imprint to be found and no price is given. Apparently, the volume is to be acquired only with the remainder of the system. J. C. J.

American Year-Book of Medicine and Surgery. Under editorial management of G. M. GOULD, M.D. W. B. Saunders & Co., Philadelphia, 1902.

SURGERY. The review of general surgery was done by J. C. Da Costa, M.D., and John H. Gibson, M.D., and covers practically the whole field of regional surgery, making this a very valuable reference book. The advances made during the year in diseases of the Genito-Urinary System are included under this head.

OBSTETRICS. By B. C. Hirst, M.D., and W. A. N. Dorland, M.D.

GYNECOLOGY. By J. M. Baldy, M.D., and W. A. N. Dorland, M.D.

ORTHOPEDIC SURGERY. By Virgil P. Gidney, M.D., and J. H. Waterman, M.D.

OPHTHALMOLOGY. By H. F. Hansell, M.D., W. Reber, M.D.

OTOLOGY. By C. H. Burnett, M.D.

DISEASES OF THE NOSE AND LARYNX. By E. F. Ingals, M.D.

ANATOMY. By C. A. Hamann, M.D.

These sub-heads make up the volume devoted to Surgery.

Volume II., as has been the case for two years past, is devoted to Medicine, in which the section on cutaneous diseases occurs. It is the work of Duhring and Hartzell and is in entire consonance with the excellence of their abstract work in other places. We notice a praiseworthy tendency on the part of the reviewers to exercise their critical faculties on the articles they review. It seems to us that in this lies the future of these annuals. Outside his special line a man is little apt to judge accurately of the value of any contribution and it is well for some one to point the way authoritatively. It is impossible to review a review critically and it is invidious with evidence of so much toil before you to select any special section for praise. The work has been everywhere maintained at its old standard. There are chapters on Legal Medicine, Hygiene and Physiologic Chemistry in this volume.

NEW EDITIONS.

Ready Reference Handbook of Diseases of the Skin. GEORGE THOMAS JACKSON, M.D. Fourth Edition. New York and Philadelphia: Lea Bros. & Co., 1901.

Dr. Jackson has marked the progress of the "benign cycle" he speaks of in his preface as constituted by public appreciation and his own efforts by the introduction of some new affections and a cutting of the text to keep it within its former limits. It could be desired that he had left out Acne Urticala or baptized it anew. However, that is a matter for him to determine, as is the substitution of a plate of adenoma sebaceum for the old one of xanthelasma we had learned to look for. Perhaps the author will be glad to have attention called to p. 209, where necrotica instead of necroticum appears as a qualifier of granuloma. In the preceding paragraph, Virchow's old notion of the relation of "proud flesh" to granuloma reappears after it had seemed that even its ghost had been laid. The connection is fanciful and granulation tissue formation can hardly be laid to germ activity.

Venereal Diseases. JAMES R. HAYDEN, M.D. Third Edition. Lea Bros. & Co., 1901.

It is questionable whether matters have been improved by transferring this volume to the Pocket Text-Book Series for anyone concerned. It is quite good

enough to have escaped that act of deglutition and its gaudy red binding. Dr. Hayden is a man of convictions and holds firmly to his views that gonorrhea in its beginning is a serous discharge and that irrigation has no place in its therapeutics. He errs, however, in imagining that bladder irrigation is a routine measure in the Janet school, or that prostatitis commonly complicates the procedure. It seems a little censorious to rule it out of rational methods. Chancroid is considered to be capable of originating *de novo* from filth. Ducrey's bacillus is mentioned and dismissed as not of demonstrated pathogenicity, but there is no mention of the many recent successful cultivations and inoculations. There are new chapters on vegetations and herpes.

Pathology and Treatment of Sexual Impotence. VICTOR G. VECKI, M.D. Third Edition. Philadelphia: W. B. Saunders & Co.

This book was reviewed here in its first edition. There is nothing to be added to what was said then except congratulations to the author on its success. Cursory reading shows for addition, which means either that we do not advance in this line or that the treatise was good enough at the time of its translation, which is doubtless true. It is a clever handling of a topic fraught with danger and one without a play to a pormologic gallery.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

301ST REGULAR MEETING, DECEMBER 17, 1901.

JAMES M. WINFIELD, M.D., *President.*

A Case of Lichen Planus.—Presented by DR. P. A. MORROW.

The patient was a man who had come under his observation about six months ago with an eruption on the inner side of the left thigh extending down below the knee, and also on the outer border of the leg just above the ankle. It had been a question in his mind whether it was a disseminated lupus or lichen planus, but he had concluded that it was a case of lichen planus. It was non-symmetrical and the lesions were more or less circinate. Unfortunately the lesions had largely faded out under the treatment that he had received. The eruption at one time had also been around the genitals on the left side. The eruption had existed altogether about two years.

DR. C. W. ALLEN said that at first glance the case looked like one of lupus erythematosus, and a number of pale bluish lesions resembled those now exhibited by a young girl with lupus pernio of the face whom he had shown to the society last winter. At the present time it would be very difficult to make the diagnosis from the lesions presented in his case. He inclined to the diagnosis of lupus erythematosus in the case under discussion, despite the itching at the beginning.

DR. G. H. FOX said that he would not like to make a positive diagnosis by gas light, but from the general distribution of the eruption, down on the thigh and upon the leg, he was inclined to think it was lichen planus.

DR. DADE and DR. JACKSON made a diagnosis of lichen planus.

DR. J. A. FORDYCE said that he would not like to make a positive diagnosis. There were some features of lichen planus and some of lupus erythematosus. The latter diagnosis had first suggested itself to him on seeing the case.

DR. E. B. BRONSON said that he did not think it was lupus erythematosus, and he saw no evidence of lichen planus, but he would not venture a diagnosis.

DR. S. LUSTGARTEN said that there were some polygonal nodules like those of lichen planus. A rather unusual feature was atrophy in the centre, nevertheless he had seen this a number of times, and it was easy to understand that a superficial atrophy might occur in this disease. The lesions on the wrist, a classical position in lichen planus, also pointed to that diagnosis. He saw no evidence of lupus erythematosus with the exception of the atrophy.

DR. A. R. ROBINSON was not willing to make a positive diagnosis at present, but inclined to lichen planus. Atrophy, in his opinion, was not at all infrequent in lichen planus, and was sometimes quite marked. He would not look upon the case as one of lichen planus.

DR. H. G. KLOTZ said that he favored the diagnosis of lichen planus. The appearance of the lesions restricted to one side of the body was not so very unusual, although he understood that in the present case a few lesions were present on the other extremity. Atrophy was commonly observed in the ringed forms, but it was only superficial, affecting solely the epidermis and not the cutis, and often was only apparent.

DR. GEORGE T. ELLIOT said that the case presented some of the features of lichen planus, but the fact that it was unilateral, that the lesions were grouped and that some of the circinate lesions were covered with a scale were against such a diagnosis. The only case of lichen planus that he had seen with atrophy had presented only very slight atrophy in the center. He looked upon the case as a late papular syphilide.

DR. JAMES M. WINFIELD said that the case presented resembled one he had seen last spring in a woman of forty. He had thought of syphilis at the time, but could get no history or any other evidence of that disease.

DR. MORROW said that the patient had come to him about six months ago with a letter from Dr. Trembly in the Adirondacks. It was stated that the case had been treated for a number of months previously for syphilis, but with an entirely negative result. Dr. Morrow said that on first seeing the case it had been a question in his mind whether the case was one of lichen planus or of lupus. The man's wife had recently died of tuberculosis. He had made a diagnosis of lichen planus as the case had presented at that time some of the features of that disease. Unna's ointment had been prescribed at first, but without benefit. Finally, he had given bismuth and mercury with Unguentum Aquæ Rosæ, and since then the eruption had taken a decided change for the better. Dr. Morrow said that he had removed two sections and had submitted them to a pathologist, who had reported that there was absolutely no evidence of lupus, but very positive evidence of the changes of lichen planus.

A Case of Herpes Circinatus Vesiculosus.—Presented by DR. ROBINSON.

The patient was a lady of about thirty-five whom he had first seen about four days previously. She had been successfully vaccinated a short time before. Two weeks ago a lesion had formed on the back of the hand. The central portion was raw and excoriated, and there was a good deal of exudation on the free surface. The peripheral portion showed a great deal more induration, was raised and presented bullæ. When seen to-day the central portion was again nearly normal. He presented the case as one of herpes circinatus vesiculosus.

DR. KLOTZ said that he had seen a very similar case that same afternoon at the German Dispensary. The lesion was also on back of the hand, and showed the same arrangement of zones. There was healthy epidermis in the centre, surrounded by a ring about $\frac{1}{4}$ of an inch wide, where the epidermis had been detached and replaced by a new, thin layer, and in the periphery there were some vesicles, though not so marked as in the case just presented. There was another patch on the finger, and some on the chin, face and neck.

DR. S. SHERWELL said that this disease was supposed to be derived from the lower animals, yet he had never seen this vesicular form in these animals or in any case resulting from contagion with these animals. He could not recall having seen in the human subject a case exactly like the one under discussion.

DRS. MORROW and FOX accepted the diagnosis.

DR. ALLEN said that he had occasionally seen this form of ringworm. He recalled having seen it upon the wrist in a young child. In that case the whole wrist was involved. He had seen recently a child with disseminated ringworm and patches over the face, neck, hands and arms. The mother and father also exhibited the same lesions, and inquiry showed that there was a cat in the household having what was called the "mange."

DR. WINFIELD said that he had seen that day a man with ringworm, and had been told that several others besides him had developed the same lesions after having been shaved in a certain barber shop.

DR. ROBINSON said that a description of exactly this form of ringworm had been found in one or two publications. One author declared that this special variety of ringworm gave a special culture, a white one.

A Case Presented for Diagnosis.—By DR. G. T. ELLIOT.

The patient was a man who five years ago had had a "boil" behind one ear. A physician had incised it, and since then the process now present had been going on, and had steadily increased. The diagnosis lay between lupus vulgaris serpiginosus and lupus erythematosus.

DR. ROBINSON said that he did not think this was a case of lupus vulgaris, but he would not at present risk a diagnosis.

DR. SHERWELL said that he was much in the same position. He was of the opinion that there were certain forms of lupus which were indistinguishable clinically and even by microscopical examination.

DR. BRONSON said that the case was certainly a very curious one, but the appearances seemed to favor lupus erythematosus rather than lupus vulgaris. The history, the duration, the appearance of the cicatrix, the continuity of the border, the absence of distinct lupus tubercles and of recurrences in the cicatrix and the absence of very marked infiltration all favored the diagnosis of lupus erythematosus. The ulceration present was probably an accident not necessarily due to the disease. He had never seen ulceration following lupus erythematosus that had not been interfered with in some way.

DR. FORDYCE thought that lupus vulgaris could be excluded for the reasons given by the last speaker. One might think of blastomycetic dermatitis. The case reminded him of a woman seen at the City Hospital some years ago with a chronic ulcerative process of the scalp of doubtful nature.

DR. DADE favored the diagnosis of lupus erythematosus.

DR. ALLEN thought the case was one of tuberculosis of the skin. The case did not seem to him to correspond very well to either lupus vulgaris or lupus

erythematosis. The original lesion in all probability had not been a boil, but a tuberculous lesion, the first lesion of the process now present. The history showed that the lesion had been present for nearly six months before it had been incised, thus proving that it could not have been an ordinary boil.

DR. O. H. HOLDER thought the very red area on the scalp did not correspond at all with the area of central atrophy seen in erythematous lupus. It was probably a tuberculosis.

DR. H. H. WHITEHOUSE said that he had had an opportunity of seeing this case also by daylight, and he had come to the conclusion after careful study of it that it was one of lupus vulgaris. One nodule was present in the anterior portion of the scar, and had been broken down, but was healing. The manner in which the disease spread at the border by the formation of nodules which ulcerated was very characteristic. The clinical appearances on the jaw and behind the ear would also stamp the process as an ulcerative one. The early history of this so-called boil pointed to the possibility of an infection at that time. He also thought the character of the scar resembled lupus vulgaris rather than lupus erythematosis.

DR. KLOTZ called attention to the fact that there may occur a syphilitic affection closely resembling the one under discussion. There was a superficial serpiginous tubercular syphilide which spreads in the shape of a narrow borderline. The fact that pus had been found under the crusts would not stand against this view. Still he only offered this as a possible diagnosis.

DR. ELLIOT said that he had never seen lupus erythematosis ulcerate, and there had certainly been ulceration in this case behind the ear. His diagnosis, therefore, had been lupus vulgaris. One was not helped by calling it a case of tuberculosis of the skin; it should be called either lupus vulgaris or lupus erythematosis. The border was totally different from any lupus erythematosis that he had seen, if only in the existence of crusting. The majority of persons at the present time called lupus vulgaris tuberculosis and lupus erythematosis was also said to be tuberculous. He would report at the next meeting upon the microscopical examination.

DR. FOX said that Hebra claimed that lupus invariably occurred before the age of twenty, and it was well known that this was the rule. He only knew of one case in which it had occurred for the first time late in life, and that had been in a man of sixty years. He would like to know the experience of others on this point.

DR. BRONSON said that he had seen a case of lupus exfoliatus which had apparently originated in a fistula from an ulcerated tooth. Apparently as a result of a tubercular infection there had resulted from this a typical lupus vulgaris. It had pursued a very slow course. It had begun when the patient was well on in adult life.

DR. ELLIOT said that he had seen a number of cases beginning rather late in life, and the patient just presented was fifty years of age. It did not follow that our knowledge could not change since the time of Hebra. One should not base the diagnosis upon age. He could not see why tuberculosis should not start in the skin later in life just as tuberculosis of the glands and other organs might begin later in life. He would admit, however, that it occurred very rarely late in life.

Case of Pityriasis Rubra Pilaris.—DR. S. SHERWELL referred to this case, occurring in a medical man, shown in March meeting of 1901. He had exhibited the case some months ago to the society. Most of the members at that time had

considered it a case of Pity. Rubra Pilaris. The case had been reported at the meeting last April. Under date of November 21 the patient had written him stating that he had under treatment entirely recovered several months since and had been free from relapse.

Alleged Recovery from Mycosis Fungoides.—DR. G. H. FOX said that he had heretofore never known a case of mycosis fungoides to recover. He wished, therefore, to present the photograph of a patient whom he had seen five years ago. A year before this there had been large itching disks on the body of uncertain character, but after a year it was plain that the case was one of mycosis fungoides, and the diagnosis was confirmed by one or two members of the society. Subsequently the woman had written to him that the eruption was disappearing. One month ago he had written to find out whether she was still alive. She had replied that she was entirely well and that there had been no return of the disease. He did not state that she was well, but that she had written to him to that effect, and the interesting point was that, according to the usual duration of the disease, she should have been dead. He had known the premycotic stage to last many years, but most of the cases of generalized eruption that he had seen had not survived more than two or three years.

DR. H. H. WHITEHOUSE reported a case of mycosis fungoides, seen in the tumor stage, which he had gotten entirely well under large doses of arsenic. A year and a half after the disappearance of the eruption the patient had had an attack of peritonitis, and a month or two after this illness the eruption had returned. Under large doses of arsenic both by the mouth and hypodermatically and other remedies including chaulmoogra oil no improvement had resulted, and she died in the New York Skin and Cancer Hospital as a result of the disease.

Eruption Resembling Acne Varioliformis.—DR. E. B. BRONSON reported upon the young man presented at a former meeting who had had a number of lesions resembling acne varioliformis. None of the lesions were at that time at all active. Recently there had been a recrudescence of the disease on both legs. The lesions began as a slight inflammatory area without much infiltration, starting usually with a small scale in the center. On removing this a minute punched-out ulcer, with a reddish base was found. This would steadily increase to the size varying from that of a millet seed to that of a small pea. The most active measures had been required to check this ulcerative process.

Lupus Vulgaris; Death from Acute Tuberculosis.—DR. GEORGE THOMAS JACKSON said that he would like to report upon a case he had presented some years ago, a boy having lupus vulgaris, who when first seen appeared to have lupus erythematosus with enlarged cervical gland. This boy had died during the past summer of acute tuberculosis.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

Wednesday Evening, January 15, 1902.

W. K. OTIS, M.D., Chairman.

A New Cystoscope for Catheterization of Both Ureters.—DR. F. BIERHOFF.

DR. BIERHOFF.—Mr. Chairman and Gentlemen: The instrument that I have pleasure in demonstrating to you this evening some of the gentlemen, I think, have seen. It has been shown at some of the

other Societies. The instrument is a modification of the Nitze-Oberlaender single catheterization cystoscope and follows this as a model, the difference, however, being first the existence of two tubes (two distinct, independent tubes), in the catheterizing portion. These tubes communicate at the proximal end with two cannulæ, closed, in the usual fashion, with a small screw cap; at the distal end with two knees instead of one, which are controlled, however, by the one screw, as is the case in the old instrument. In addition—and this I believe to be the important feature in the modification—the catheterizing portion is movable upon the cystoscope, or, rather, the cystoscope is movable within the catheterizing portion. The idea of that is that in the old instruments—and if I may put it this way, in the old Nitze-Oberlaender, after the catheter lay in the ureter, in withdrawing the cystoscope and leaving the catheter, the catheter became turned about the lamp and it not infrequently happened that, if there was present any degree of muscular spasm at the sphincter, or the compressor urethræ, the catheter was drawn out of the ureter as the cystoscope was withdrawn from the urethra because of the firm pressure of the catheter against the cystoscope. You will see that, if we were to attempt that with a double instrument, the danger of drawing one, or both catheters out of the ureters would be only increased. In order, therefore, to avoid this, I have had the instrument constructed so that, after the catheters lie in place in the ureters, by simply turning the cystoscope within the catheterizing portion, the beak of the instrument is brought upwards and is withdrawn as the old instrument was. The catheters, however, lie on the lower surface. That prevents, to a great extent, the firm pressure of the catheter against the cystoscope, as in the old instrument, and in each case in which I have attempted to use it, I have succeeded in leaving both catheters *à demeure* with far less trouble than I formerly had in leaving one. The instrument is used in the same way as the single catheterizing cystoscope, and is of precisely the same size. We have succeeded in keeping it down, by having the cannulæ and tubes made smaller, and by using a somewhat smaller catheter. We have succeeded in getting the instrument down to exactly the same size as the single Nitze-Oberlaender. In using, I prefer to use a black catheter for the left ureter, a brown catheter for the right. That gives me, at a glance, after the catheters are in place, the cue as to which kidney I am collecting the urine of. When the instrument is inserted, it is done in the same manner as the former instrument was used. One catheter is inserted into the ureter for about 4 to 5 centimeters. The instrument is then turned toward the other side, and in that manipulation, the catheter which lies in the ureter leaves the field altogether, so that it does not disturb the field of vision in the slightest. The other catheter is then inserted into the second ureter, and the cystoscope turned to the middle line. Both catheters still remain in the ureter, and the cystoscope is then withdrawn after the manner I have said. Those of you who have attempted to, or have succeeded in catheterizing both ureters in one sitting and leaving both catheters *à demeure* with the old single catheterizing cystoscope, how difficult, after the first catheter was in situ, it was to insert the second, the chief difficulties being that the first catheter would almost invade itself across the field of vision and obscure or completely hide the second—and that it was an exceedingly hard thing to get that catheter out of vision with the cystoscope lying in the urethra. That is avoided with this instrument and, as I say, by the simple maneuver of turning the cystoscope within the catheterizing sheath. The catheters may be left *à demeure*

with very little difficulty. A further consideration is that the catheterizing portion may be removed, and sterilized by boiling. Of course, the *cystoscope* cannot be sterilized by boiling any more than any other of its type, but must be sterilized with fluid sterilizing, or antiseptic media.

An additional advantage that this instrument presents is that it may be used as a double current irrigation cystoscope, in case the fluid should become turbid with either blood, or pus. I want to say in passing, that it is not intended to evacuate clots or shreds with this; simply to evacuate fluid, or to renew the fluid. The operator does this by the simple procedure of using the two stop-cocks as one was used with the single instrument. In fact, we have here two independent tubes, permitting us to inject through the one and have the outflow through the other, and either to use this instrument as a single or double-current catheter. In case we want to catheterize one ureter, it is an easy procedure to close the stop-cock on the one side and catheterize through the remaining tube.

I want to say that the field of vision in this instrument is precisely as large as is the case in the imported instrument. For that reason you will find it is fully as useful as the old. It was made for me by the Kny-Scheerer Company, of this city, and we have embodied one or two improvements in the instrument, which, I think, will permit of all these instruments being repaired in this country. In other words, the chief difficulty with the old instruments lay therein that, if the lens system became affected in any way, or clouded, which occurred through the trickling of water alongside the prism, and not through the condensation of vapors in the tube itself, it was necessary for us to pry out the prism and, in removing the optical portion, it not infrequently happened, or, in fact, it was almost invariably the case, that the electrical connection was destroyed and had to be entirely replaced. I requested the foreman in charge of their works to see whether we could not obviate this difficulty, and he has succeeded in doing it very nicely. In this instrument, it is possible by simply removing two screws, to remove the entire optical apparatus except the prism, without destroying in any way the electrical connection.

DISCUSSION.

DR. F. TILDEN BROWN.—Mr. President, I have not had a chance of looking at this instrument which Dr. Bierhoff has presented to the Society, but from his description of it I think without any reserve I can offer him my heartiest congratulations on having brought out an instrument which there is a decided demand for. His description of the working of the different parts I believe I comprehend and can see the advantage of each one. His ability to keep the visual field clear was a great advantage and to economize space only by lessening the size of the catheters and the ability to turn the telescopic parts in the sheath and thus favor the removal of the instrument without displacing the catheters; and one thing which he did not mention, but which we all, I think, appreciate, was probably in his mind in devising this instrument or in perfecting it on the model of the old Nitze-Oberlaender, is the value of collecting the urines synchronously, the ability to know just what the functional performance of each kidney is at the same time, whereas in the single barreled instrument the first may collect urine at a time when the patient is nervous and perturbed and gather low specific gravity urine. At the time when the next urine is collected after ten or fifteen minutes the patient's system has quieted down or some other influences are at work and a very different action may be manifested by the other kidney. Of course, where

one kidney is markedly diseased with a new growth giving issue to blood, or one is a tuberculous kidney, and the other not, of course, these material differences in specific gravity do not count for so much; but there are a good many cases where the knowledge derived from the examination of two urines which are pretty nearly the same and yet have a shade of difference may help to throw light upon some abnormality existing in one gland or the other.

I am particularly interested in seeing this instrument, because as long as two years ago, when I showed my double-barreled ureter cystoscope, I said at that time that although I had had very little chance to use it, I had had enough to convince me of the fact that bilateral ureter catheterization was a feasible point and that I thought that in the future that no instrument which failed to aim at collecting the urines synchronously would be considered up to date.

The instrument which I have recently been working on has added to the two original catheter canals two irrigating canals so that my present instrument gives me an opportunity to catheterize both ureters and at the same time to irrigate in just the way that Dr. Bierhoff says can be done with his instrument.

DR. VAN DER POEL.—I have recently had occasion to use this cystoscope of Dr. Bierhoff's, although not as thoroughly as might be, and as far as it went can thoroughly recommend the instrument. I was more than pleased as regards the field of vision; quite equal to the Nitze-Oberlaender or the Nitze instrument. The catheterizing of the ureters attempted in that case was unfortunately prevented at the moment by the breaking down of the controller, but the ureter was very easily seen, being very easily brought into view, so that the catheterization would be as easy with this cystoscope as it would with the ordinary Nitze cystoscope, with one exception, perhaps, and that is that the ureter on the patient's right side turning the instrument to the right would cause the right hand to become more or less slightly cramped, which could easily be overcome by practice. Otherwise I could see, as far as I went, no disadvantage whatever in the instrument. The advantages of the instrument have been very thoroughly expressed by Dr. Bierhoff and he can be congratulated on the outcome of it. I haven't had an opportunity to work it out thoroughly.

I think, Mr. Chairman, almost too much stress or importance is laid, perhaps by most all our cystoscopists, upon the irrigating apparatus. There are very few cases, as far as my experience goes, where it is necessary, where we cannot remove the cystoscope without the slightest difficulty whatever and irrigate the bladder either through a large syringe or through the catheter and introduce the cystoscope again much more quickly than we can irrigate. I have yet to find a case that has objected to a second introduction of the cystoscope on that account. Whenever I find the field of vision become cloudy or difficult to see through I have withdrawn the cystoscope, and I think that also gives more or less rest to the patient.

I think in a large majority of these cases you may withdraw the cystoscope and simply irrigate as through an irrigating tube.

DR. OTIS.—I think it is a most excellent instrument, the best instrument of the concave type, as Dr. Brown I believe has entitled it, for catheterizing urine, I have ever seen. I agree thoroughly with Dr. Van der Poel in regard to the irrigation cystoscopes. I have had a number of irrigation cystoscopes and without reference to catheterizing the ureter they have been unsuccessful. It takes very little blood or very little pus to obscure the view to such an extent that it makes it difficult to see anything through the cystoscope. Now, when we have two small

tubes, as has been the plan ever since the first device by Berkeley Hall, shortly after the origination of the Nitze cystoscope, the throwing of water through one of these tubes into the bladder already distended does not wash out that bladder, but the fluid takes the shortest course or immediately goes out the other tube. The only way to clear out that bladder is by emptying it, and the best form of irrigating cystoscopes—one can take out the telescope in such and wash out through the hole there or take out the cystoscope and replace the optical apparatus and do that thus in the form of a cystoscope and get irrigation. There is such a cystoscope with a prism, perhaps the one used by Dr. Young of Baltimore. That does give you a certain chance; but even with such an instrument if there is any bleeding to amount to anything you cannot see anything with the cystoscope. There is also certainly another objection unavoidable in all these catheterization cystoscopes of this type—the telescope is small and the lenses are small and consequently it does not admit as much light as the ordinary cystoscope. The lens system has to be reduced very much in diameter and a very small reduction in diameter reduces very markedly the amount of light that comes through the cystoscope. The two types of cystoscopes catheterizing the ureter—the concave or this indirect type and the direct type, both have certain advantages. This type of instrument has the advantage of being able to catheterize the ureters in many cases in which the convex type cannot be used at all; but on the other hand, the fixed tube is a simple instrument; it requires no apparatus for guiding the catheter and has the direct route from the ocular end to the ureter. It makes a simpler instrument in some respects. It also permits without increasing the calibre of the instrument to have a larger lens system.

DR. BIERHOFF, closing discussion.—I only want to thank the gentlemen for the kind words of encouragement they have given me, and to say that I purposely did not touch on the indications for, or the value of the catheterization of both ureters simultaneously, because I felt that I was speaking to gentlemen who knew about the value of the method; consequently there was nothing new for me to say on this subject. I thoroughly agree with what Dr. Brown says, that it is one of the required tests, that is, the catheterization of the second ureter at the same time that the first is catheterized, for the gaining of any correct idea as to the functioning powers of the kidneys. It seems to me that it leaves us with a very incomplete knowledge of the facts, if we content ourselves with catheterizing one ureter at one sitting. It strikes me that the only correct information to be obtained is to be obtained through the simultaneous catheterization of *both* ureters.

I regret, also, the occurrence which prevented Dr. Van der Poel's using the instrument, and as this was due only to the breaking down of the controller at that time, I have since used the instrument without any repairs whatever, and the conditions that were present at that time have been absent. I hope, therefore, very soon to be able to allow Dr. Van der Poel to obtain the desired result.

I want to say also, with regard to the irrigating apparatus, that I lay very little value upon it. I have simply added this because, having the two tubes, it is possible to empty, irrigate and refill the bladder through them, without removing the instrument. I lay very little value upon it because I prefer also, as Dr. Van der Poel has said, to withdraw the instrument and wash out the bladder, refill, and then reinsert the instrument, because, if the instrument will pass once without much pain, it will pass a second time. There is one condition also which militates against the complete use of any irrigating cystoscope, and that is that

very frequently, when turbidity, or uncleanness of the field of vision occurs, it is due not so much to the presence of turbid fluid, as to the catching of either a small blood-clot, or shred in the apparatus, which lays itself upon the prism and thus obscures the field of vision. I believe that the fact that one cannot, on moving the instrument, see more clearly, is one of the indications also for removing the instrument. I lay very little stress upon the value of the possibility of irrigating and refilling the bladder with the instrument in the bladder, but principally upon the possibility of catheterizing the ureters and leaving the catheters *à demeure* with greater ease than with any other instrument.

Operation for Azoospermia.—Paper by DR. EDWARD MARTIN of Philadelphia. This paper had for its object the presentation of an operation designed for the relief of azoospermia incident to bilateral obliterating epididymis. It was shown that such obliteration usually occurs in the tail of the epididymis. It was further demonstrated by a series of microscopical laboratory studies that well-formed, motile, spermatozoa could be found from the vasa efferentia and from the upper part of the epididymis of dogs, sheep, rabbits, and bulls. A study of the spermatozoa taken from a human testicle demonstrated that they underwent certain changes during the passage from the epididymis, that even in its upper part, or from the vas recta, many of the spermatozoa were apparently well formed. Three dogs were operated upon by dividing the vas and attaching its upper end to an opening made in the head of the epididymis. The emissions of these dogs, which occurred days or weeks afterwards, were swarming with motile spermatozoa. A man who suffered from azoospermia, as the result of a double gonorrheal epididymis, was then operated upon. The vas was split, and one side of this opening was sutured to the borders of the wound made in the head of the epididymis. From this latter wound motile spermatozoa were obtained. The second emission following this operation two weeks later was found to be full of motile spermatozoa, though the microscopical examination was not conducted until twelve hours after the emission.

The operation is safe, though somewhat tedious; and for reasons set forth at length in the paper, seems to promise complete, permanent cure for a condition which is, at times, responsible for unhappy married life.

DISCUSSION.

DR. STURGIS.—The subject of the paper is so novel and so comparatively unknown that it would be impossible to discuss it intelligently without further experiments and further knowledge on the subject; but there are a few points that were mentioned by the reader which I should like to discuss. He called attention to the fact that in many of these cases the spermatozoa were more or less deformed, and if I understood him correctly he argued from this deformity of the spermatozoa that they were probably incapable of fertilizing the ovum. This point I do not think has ever been proven. Dr. Cutter of Boston some years ago published a paper upon this subject, but at the present moment I am unable to say whether in the cases from which his specimens were taken the patients were capable of fertilization. I should think, speaking generally, that the question of fertilization would depend upon their power of motility rather than upon certain deformities of form, although, of course, if these were very marked it might lead to sterility in the male.

As regards the power of motion there are many reasons why the spermatozoa seen under the microscope might be considered as incapable of fecunda-

tion owing to a lack of motility. This might be caused from the semen being too thick, of which there are examples in literature, notably one by Beigel. In this case by diluting the semen in vaginam the spermatozoa at once became active and fecundation of the woman occurred where previously it had been absent. The same also is true if the secretion of the prostate is deficient, notably in phosphatic elements, which appear to be necessary for the health of the spermatozoa. When these bodies are first emitted from the testes it is probable that they are not endowed with motion, and in some instances apparently they are united much as a bundle of arrows might be tied together. When they come in contact with the prostatic secretion this appears to call them into action. They separate from each other and become endowed with motion. It is well in this connection also to remember the experiments of Oblonsky, who found that the addition of a weak alkaline solution to the semen of dogs induced motion in the spermatozoa when they were immobile and apparently dead.

As regards the viability of the spermatozoa in acid secretions it has been repeatedly found that if the vaginal secretion be over-acid the spermatozoa die, but a moderate amount of acidity does not appear to produce a deleterious effect. Thus it is found that spermatozoa will live in the urine, which in its normal condition is more or less acid, but the acidity is so slight that for practical purposes we may consider the urine under such circumstances as a bland fluid. The uterine secretions on the other hand are alkaline and it is probable that the spermatozoa being deposited in the upper portion of the vagina make their way through the cervix uteri to find a more congenial medium in the secretions of the uterus. A moderate degree of acidity, therefore, does not probably induce the death of the spermatozoa.

It does not follow that because a man has epididymitis that he is necessarily sterile. If the inflammation of the epididymis be unilateral of course the other testis is still capable of fecundation and performs its functions properly; but where both are attacked, then the weight of evidence is in favor of sterility in the male. I know cases have been reported.—indeed we have heard some instances given to-night, where a man with a double epididymitis was still the father of children; but on carefully investigating such histories it was found that the putative father was not the real one, and it is well to remember the old adage that accidents happen in the best regulated families. I do not myself believe that where the body of the epididymis itself has been the seat of inflammation, that the man is ever fruitful; but it may happen that where the inflammation is seated only in the globi major or minor, the body of the epididymis itself escaping, that fertilization is still preserved. The cases where the inflammation is limited are so rare that I cannot at the present moment recall a single case in support of this theory. In this connection it should also be remembered that spermatozoa are found in the vasa deferentia and vesiculæ seminales for quite a length of time after they have passed from the testes into these portions of the genital apparatus, hence a man may possibly be capable of procreating during the first intercourse after an attack of epididymitis provided these organs have not been emptied of their contents by a seminal emission. Such has been found to be the case in persons who have been castrated, but after the first seminal emission, and after the surplus store of spermatozoa had been exhausted, no fresh supply occurs and hence sterility follows.

DR. JOHNSON.—I would like to express an extreme degree of gratification for the most interesting paper which we have heard from Dr. Martin. I would

like also to congratulate him upon the exhaustive study which he has made of the subject and upon the most excellent result he has obtained in the single case reported. I should feel that to draw general conclusions from the result of a single operation was premature, and it being apparently the only, or one among very few operations of the same kind ever done I should say that though promising one could hardly formulate any definite opinion in regard to the result of such an operation in general. It is harmless, of course, and it is to be hoped useful in every case.

My own experience in relation to the condition of sterility due to azoospermia following double gonorrheal epididymitis is not very extensive, and yet in years gone by, notably during the earlier years of my practice, I was especially interested in this topic and it so happened that a very considerable number of my patients had double epididymitis of a gonorrheal origin, and it so happened also that I was able to watch them during the years and after some of them married. I was equally surprised and gratified that most of them had children within a year from the time they were married. I remember one individual whom I treated for a double gonorrheal epididymitis within 7 months of the time that he was married. His wife bore him children within a year from the time he married her; and I can remember another case,—several, in fact,—in which I believe gonorrheal epididymitis was not followed, I am quite certain, by sterility for the children resembled the father in every particular. I do remember one individual whom I had under observation for a period of I think as much as 3 years. During that time I examined his semen at intervals of about 3 months and during I think the entire 3 years there was at no time any spermatozoæ to be found in his semen. He however subsequently married, the canal became very patulous and his spermatozoæ were extruded and his wife conceived. I suppose that during several years as many cases as a dozen came under my observation who had suffered from double gonorrheal epididymitis and of those I remember but one in whom the spermatozoæ did not return. I had the opportunity of examining the fluid thrown out during the orgasm of that individual many times and during a series of years and at no time were there any spermatozoæ to be found. The case is a little more particular because that man had had a pretty severe epididymitis upon one side but a mild epididymitis only upon the other—comparatively slight. He remained permanently sterile and as far as I know never was able to discharge spermatozoa again.

I recollect during the year 1886 and 1887 that I was attending the courses of the late Professor Ultzmann. It was his opinion that if at the end of twelve months after an attack of epididymitis involving both sides no semen appeared in the urine, no spermatozoa appeared in the urine, that there would never be any. I recollect also that he used to caution us against the then more or less popular practice of strapping the testicle. In his opinion the method of treatment of strapping resulted rather in an obliteration of the duct than in anything else, and he believed that some cases permanently sterile were due to that form of treatment. He was in the habit of prescribing massage of the testes.

DR. BROWN.—There can be no doubt whatever of the very great personal interest of this communication of Dr. Martin's and I am inclined to believe that it may be of very great value. I feel unable to discuss any of the points brought up in the subject to-night because they are so novel, but I congratulate

myself on having heard of the method, which promises to be of efficiency in some of these deplorable cases, of which I have seen a fair number, and I must say until to-night, from Dr. Martin's statistics and what Dr. Johnson has just said, I had imbibed the same belief that Dr. Guitéras had, that a double epididymitis was commonly followed by obstructive sterility.

DR. GUITÉRAS.—The profession owe a great deal to Dr. Martin for his exhaustive study of this subject. The practitioner as a rule and the surgeon think that if the wife has been curetted that all has been done that can be done to restore a condition which will result in impregnation. I don't think that it has ever been brought out as clearly as might be what can be done in the case of the man himself, and I think it certainly should be taken up by the profession at large and we should all try to perform this operation whenever a case presents itself to see if we cannot restore function on the part of the male member of the family.

DR. GIBSON.—I have been very much interested in hearing about this case. For a year past I have been hoping to have an opportunity to do this operation; in fact I look over my material at the Charity Hospital hoping I can find such a case. My attention was stimulated by the contribution which I am certain will be to us interesting (I don't want to steal any matters furnished me by Dr. Lilienthal) in which he reported such an operation and the operation appears somewhat previously, some months previously, that is to say before we had an opportunity to give the results a trial and up to that time there had been no success. We are of course all familiar with the exhaustive work which has been published in the past year in the *Annales* on the subject, all of which makes me wish to have an opportunity to try it, which I believe certainly has some future and as has been stated is a harmless operation, not particularly difficult or delicate, and certainly justifiable in those cases where the faculty of procreation is lost. On the other hand perhaps remembering the energy of the processes in the opposite sex perhaps we should not become too optimistic first until we have obtained results. I would like to emphasize the position that the male is certainly to be considered the guilty party as often or oftener than the female in the lack of proper procreation.

DR. BREWER.—I want to say that even if this work which Dr. Martin has told us about was absolutely unsuccessful in the ultimate results I still feel that the work he has done is something which I certainly appreciate very much. Certainly I have never had a more interesting presentation of the facts which bear upon this question than I have had to-night. I think the results of his admirable experiences are such that this should be persisted in, should be given a very fair trial, and even if one patient is a failure, and the next and the next, I think we have reason enough to persevere in this as long as the results obtained in animals have been so successful. I am very much indebted to Dr. Martin for his instructive paper and we have all enjoyed it very much indeed. It is impossible to discuss it because as Dr. Brown says it is so absolutely new. It gives us a hint which many may possibly follow up and I hope time will show some results.

DR. FERD. C. VALENTINE.—The subject, so brilliantly presented, seems entirely new. It calls to mind the work of Posner and Lewin on elective stainings of the spermatozoon and the ovum. They found that with double-stains the nucleus of the ovum took the red color while that of the spermatozoon assumed the blue. Regarding the treatment of epididymitis there is a point which

I have not seen in literature. I refer to the use of galvanism. In some cases of acute inflammation the cautious employment of low amperage seems to give quick relief from the pain. I must be deceiving myself very much indeed if the same treatment is not the cause of hastened absorption in the chronic form of this disease.

DR. VANDERPOEL.—I congratulate Dr. Martin for his excellent work and especially in the results which he has shown in that one case. He has opened up a new field, which I think all of us will be interested in. As Dr. Brewer says, even though the first, second or third cases may be unsatisfactory, the results of experiments so far certainly will justify us in proceeding much further. It has hitherto been thought among the large majority of cases that double epididymitis has produced sterility, although not absolutely. I believe Finger gives about 40 per cent. in double epididymitis, although previous to that Singer of Leipsic went even so far as to say almost 90 per cent., I think, resulted in general sterility. We know nothing about the operation and it is very difficult to criticize it in any scientific manner because we are absolutely ignorant, except upon the points that Dr. Martin so cleverly and kindly brought forward.

DR. GUIERAS.—In answer to some inquiry regarding the number of cases who have had double barreled epididymitis, regarding procreative ability, statistics show 65 per cent. are sterile; the remaining 35 per cent. can procreate.

DR. OTIS.—I have nothing to say except to congratulate Dr. Martin on introducing a possible aid to these patients, in itself so important to females, and also the fact that these patients have so much mental distress in regard to their condition. Even when procreation does not come into consideration, the fact that they are sterile has an exceedingly bad mental effect; consequently any operation which holds forth such a good prognosis as Dr. Martin's, with so little danger as indicated, is a great thing, and I shall be very glad to use it when opportunity affords.

DR. EDWARD MARTIN, of Philadelphia.—I have to thank you for the patience with which you have listened to a rather lengthy paper. None the less I spared you since I omitted the reading of the details of the experimental and microscopic work. There have been many useful suggestions in your remarks. I recognize that this operation is still in its experimental stage and I brought it before you in the hope that you would help in determining its true value. I shall not regard it as complete until a man has been operated upon and has begotten a child like unto him or until the dogs can produce pups which resemble to some extent their paternal progenitor. Even when this is done by the dogs which have been short circuited the demonstration cannot be regarded as complete without corroborating evidence from the human side. We cannot too carefully guard against assuming that the conclusions resulting from experimental research necessarily apply to human mechanism.

In regard to the fluidity of the semen in its effect on motility of the spermatozoa we made the most of our experiments on animals, but were not able to restore motility by adding either an alkaline or a neutral solution. Motile spermatozoa were obtained from the epididymis and the vas. We never succeeded in getting them from the substance of the testicle. The spermatozoa found in an ejaculation exhibited a more prolonged motility than those taken artificially from the epididymis. The microscope also shows distinct difference between the two.

It is true, as Dr. Otis has pointed out, that azoospermia is in itself a source

of distress to a man, sufficient indeed to make him embrace any means of causing their reappearance even though he have no immediate thought of paternity. This much the operation will surely do, and there is good reason to believe that it will also render him completely fertile. The case quoted as having been done by Lillenthal is one of great interest to me and I should like to know its details. At the time I prepared this operation, and even when I performed it, I did not know of any similar work. It is, however, so obvious that the records of the early Egyptians probably contain a complete description of it.

Selections.

CUTANEOUS DISEASES.

Dermatitis Nodularis Necrotica (Phlebitis Nodularis Necroticans, Philippon; Tuberculide Acneiforme, etc.)—L. TÖRÖK (*Arch. f. Derm. & Syph.*, 53, 1901, 339).

Having under his observation two patients suffering with this disease, the writer used the opportunity to contribute to the question of its point of origin; whether the primary focus is in the sweat glands or in the blood vessels. In his microscopical studies the writer was able to compare his sections with the sections obtained by the former writers on this subject, Drs. Pollitzer, Fordyce and Dubreuilh, and came to the conclusion, that the disease presents a process which starts by the way of the blood vessels. The primary changes in most cases occur in a vein, which runs between the borders of the subcutis and the cutis. The process begins as a proliferating endophlebitis which is followed by an irritative phlebitis. The lumen of the vein is obstructed, and here in the thrombus of the vein, in the wall of the vein, and in its neighborhood the necrosis is found in the first stage of the disease. The pathological process spreads from here along side the vessels, partly in the direction of deeper layers of the skin, partly outward. A more or less thick diffuse infiltration is developed, reaching the papillary layer. The necrosis of the superficial layers leads to formation of crust-covered small ulcers. Dubreuilh in a personal letter to the writer coincides with this view. No microorganisms have been found in the tissues. Inoculations into animals failed to produce any changes.

The Relation of Lupus Erythematosus Discoides to Tuberculosis with Special Consideration of the Value of Tuberculin Reaction.—WALTHER PICK (Neisser's Clinic) (*Arch. f. Derm. & Syph.*, 53, 1901, 359).

The observations upon which the writer bases this article were collected from Prof. Neisser's Clinic, for the period from 1892-1901. In all 43 cases are tabulated. The writer's object was to show that Boeck's and Roth's statistics, which convey the idea that lupus erythematosus is clinically allied to tuberculosis, cannot be accepted as presenting the real relation between lupus erythematosus and tuberculosis.

Pick in tabulating his cases considers only these symptoms as tubercular, which can be clinically proven as existing, not considering possibilities of latent foci of tuberculosis. He found only 42 per cent. of his cases exhibiting symptoms, which can be regarded positively as tubercular, the remaining 58 per cent. did not present the slightest sign of tuberculosis. As a local reaction after injection of tuberculin is regarded by nearly all observers as unquestionable proof of tuberculosis, the writer injected old tuberculin in fourteen patients with, and in fifteen without any symptoms of tuberculosis. Although a general reaction followed in many, a local reaction was visible only in one case, which cannot be regarded as a simple case of lupus erythematosus, because, although clinically it was hardly possible to make a differential diagnosis, in the beginning of the process, between lupus vulgaris and erythematosus, a subsequent development of the case, and microscopical examination rather tend to class this case as a lupus vulgaris than an erythematosus. The author could not find any record of case of lupus erythematosus where a local reaction was obtained from injection of tuberculin. His conclusion is "that we have no right to consider lupus erythematosus etiologically related to tuberculosis."

1. About Iodkalium Iodalbacid and Iodipin.—WELANDER.

2. The Demonstration of the Presence of Iodin after the Use of Its Organic and Inorganic Compounds.—A. BLOMQUIST.

3. Iodipin (Merck) in the Therapy of Syphilis (Doutrelepont's Clinic).
—By C. GROUVEN.

4. The Injection Treatment of Iodipin.—M. MOLLER, (*Arch. f. Derm. Syph.*, Vol. 57, 1901, pp. 63-113).

Welander and Blomquist in an exhaustive clinical and chemical study endeavored to determine the value of the various iodine preparations in the treatment of syphilis. The good results obtained from the use of iodine preparations are due to the quick absorption of the preparation, but owing to its quick elimination a protracted beneficial result can only be obtained by a prolonged administration of the drug, which is sometimes prevented by the unpleasant, and occasionally dangerous complications which follow the use of iodid of potash. Iodalbacid and iodipin were presented as preparations of iodine, which are longer retained by the system and which do not produce the undesirable complications. From Welander's investigations it seems that they cannot be compared with iodid of potash as regards their therapeutic effects. As to iodipin it is acknowledged by Welander, Grouven and Moller, that although it does not have the same therapeutic effects as iodid of potash owing to its slower absorption, it remains longer in the system, between four and six weeks (Moller), and does not have the undesirable after effects of iodid of potash. It can be used with advantage when a protracted use of iodine is indicated. Iodipin owing to its very unpalatable taste—more unpalatable than the taste of iodid of potash, is used in the form of daily subcutaneous injections.

1. **Experimental Investigations on the Etiology of Eczema.**—E. BENDER, M. BOCKHART and V. GERTSCH. (*Monats. f. Prakt. Derm.* Vol. XXXIII. No. 4 p. 149).
2. **Investigations Regarding the Parasitic Nature of Eczema and Regarding Staphylotoxin-eczema.**—M. BOCKHART. (*Monats. f. Prakt. Derm.*, XXXIII., No. 9, p. 421).

In order to throw more light upon the relationship between the staphylococcus aureus and albus and eczema the writers experimented upon themselves with (1) virulent agar cultures; (2) with pure bouillon-cultures of staphylococci; (3) with staphylotoxin obtained by filtration of a bouillon culture and (4) with a mixture of staphylococci and toxin obtained from a bouillon culture.

The agar cultures and the isolated staphylococci always produced on inoculation an impetigo pustule, while a filtrate of a bouillon culture when applied moist and lukewarm called forth a typical papular or vesicular eczema, which ran the course and had the appearance of an artificial eczema produced by clinical irritants (turpentine, etc.) When both staphylotoxin and isolated staphylococci are inoculated, then the action of the staphylotoxin is exerted and eczema without impetigo is produced.

According to Bockhart who conducted experimental investigations on his own body to establish the etiology of eczema, the disease is produced by the staphylococcus in the following manner. The skin follicles of a healthy but predisposed person may contain living, but inactive staphylococci, these staphylococci may acquire an increased vitality, when their nutrition in the follicles is improved, or by some external or internal cause. The result of this increased vitality will be a formation of staphylotoxin, which owing to its serotatic properties will give rise to the formation of papules and vesicles, containing serum and staphylococci. If the papule or vesicle is formed about the opening of a follicle, and only serum remaining sterile for a time exudes, vesicle formation ensues. Later the sterile vesicles formed in the neighborhood of the follicles may be infected by the staphylococci by the way of the lymph spaces in the edematous epidermis. With the penetration of staphylococci leucocytes appear in the vesicles. Whether the vesicles in their later development will turn into pustules or retain their leuco-serous contents depends upon the amount of plasmin with the staphylococci, which plasmin not only changes the vesicle into a pustule but produces complications of a purulent nature in the surrounding skin, giving rise to impetigo staphylogenes and furunculosis. In case the eczema is not cured and reaches a chronic stage, then after changes take place in the corium and subcutaneous connective which are not directly traceable to the action of the staphylococci.

GENITO-URINARY DISEASES.

A Further Report on Permanent Catheterization.—By J. RILUS EASTMAN, M.D. (*Journal of the American Medical Association*), Nov. 9, 1901, page 1221).

Eastman has employed permanent catheterization in fifteen cases, the catheter being retained for from ten days to more than sixty days. The slight, benign form of urethritis resulting from the irritation of the catheter became less active after the catheter had been in place several days. Soft rubber catheters with two

eyes were employed. The largest possible size should be used, as they fill the lumen of the urethra, thereby causing less frictional irritation than smaller ones which readily slide and twist in the canal. This also prevents the urine from escaping from the bladder between the catheter and the mucosa. Irritability of the region of the bladder neck is also relieved by the size of the catheter, preventing tenesmus and muscular spasm.

When properly applied, a retention catheter should never produce cystitis. The catheter should be introduced just far enough for the tip bearing the eyes to project into the bladder, and securely fastened, and its lumen should be large enough to drain the urine from the bladder as fast as it enters from the kidneys.

After two weeks' retention of the catheter, it was often easily possible to pass steel sounds several sizes larger than the catheter itself, because of the absorption of extensive soft and hard infiltrations, produced by the continuous presence of the large soft rubber catheter.

Permanent catheterization is advised as the method of choice in selected cases for the drainage of the bladder, because by its use the urine is removed by the natural exit. If used after operations involving opening of the posterior urethra until the perineal defect is closed, the period of convalescence is shortened since the perineal wound closes promptly if the urine is drained through the urethra. The caliber of the urethra is maintained or even increased, and the subsequent passage of instruments is rendered easy. Much of the tedious work of after-treatment, as sounding, becomes unnecessary, or is decidedly lessened. After perineal section involving removal of a portion of the posterior urethra, intermittent catheterization or sounding is exceedingly harmful and difficult of execution; hence maintenance of the urethral lumen becomes a serious task. If, however, the retained catheter is used, sounding becomes unnecessary and the new segment of urethra has a guide over which to form itself.

The urine may by this method be accurately drained into a receptacle, and bedsores, dermatitis, and much discomfort avoided. The danger of uremic poisoning is reduced, since the area of the unprotected tissue with which the urine must come in contact is diminished. For the same reason the danger of bacterial infection or intoxication is lessened. Pain and fever are notably slight during permanent catheterization, if care be exercised that the instrument does not project too far into the bladder.

Drainage of the bladder in cystitis may be accomplished by this method without subjecting the patient to a more or less dangerous surgical operation, as must be done when suprapubic or perineal drainage is employed; here also the possibility of delayed non-closing of the wound enters into the consideration. The catheter may often be introduced in such cases with as little pain and inconvenience as accompanies the introduction of Skene's catheter for permanent catheterization in the female.

The method of retention of the catheter is as follows: After its introduction it is transfixed with two safety pins just in front of the external meatus. To each of these pins is attached a narrow strap of adhesive plaster, with the glue side toward the penis. These straps fall naturally along the course of Poupart's ligaments and around the sides. They may be reinforced by two other straps, which should pass downward along the outer edge of each abdominal rectus muscle, crossing the first two near the sides of the root of the penis, and continuing down between the thighs to the buttocks. If the penis turns upward it may be easily held down by an additional strap passed transversely over its dorsum, the

ends of this strap being fastened to the skin of the buttocks or the posterior aspect of the thighs.

A. L. W.

Fallacies in the Treatment of Urethral Diseases.—BY ROBERT HOLMES GREEN, M.D. (*Journal of the American Medical Association*, Nov. 9, 1901, page 1223).

Greene ascribes the little real progress that has been made in the treatment of urethritis to the fact that our knowledge of the nature of the disease is so very slight. Even in the recent exploitation of new remedies and methods of treatment, there has been little consideration of the true pathologic conditions, and the most scientific ways of meeting them. Referring to strictures and their treatment, he says that two factors have caused the frequent cutting operations of past years, to greatly fall into disuse, namely, absence of the good clinical results which might have been expected theoretically, and the possession at the present time of a more definite knowledge as to what stricture really is. The writer's experience has been that outside of traumatic results of instrumentation, strictures of such resiliency following urethritis as to require a cutting operation are almost never met with, certainly not in men under forty years of age.

The author declares it illogical, in acute urethritis, to treat the anterior urethra alone, believing that this part of the canal is never attacked without the posterior urethra also being involved. In order to be logical it is necessary, in the irrigation method of treatment, to irrigate the entire urethral canal, anterior and posterior as well, even though the posterior portion shows no evidence of inflammation.

Local treatment for urethritis should not be commenced in any case, until the acute symptoms had subsided, that is, from six to eight weeks after the onset of the disease. By the early use of local irrigations, the gonococci or other germs causing the inflammation, instead of being allowed to battle with the forces which the body controls for their destruction, are driven into the deeper portions of the urethra and into the prostatic follicles. The tendency to "latent urethritis" is increased by this method of treatment, which is wrong, in acute urethritis, even though it render the patient more comfortable and changes the purulent discharge to a muco-purulent one.

The author quotes from a recent article on the anatomy of prostatic hypertrophy by Prof. Chiechanowski to the effect that this condition in the aged is an inflammatory disease; that if the original focus of the inflammation is towards the periphery of the prostate, an increase in connective tissue will take place and give rise to the small hard prostate; if more central, that is, if the inflammation invades the mouths of the ducts, the larger and softer variety of enlarged prostate would be formed which resembles an adenoma and is easily mistaken for that. The prostate with an enlargement consisting mainly of muscular tissue, he failed to find in his investigations. He therefore concludes, that finding all the enlarged prostates examined by him, to have an inflammatory origin, urethritis must be held accountable on account of its great frequency as a producer of inflammation in that region.

Dr. Harlow Brooks, pathologist, is also quoted as agreeing with these findings and this conclusion, after an examination of a large number of prostates for the writer, who concludes that while urethritis may not be the only causative factor in producing inflammation of the prostate, it is certainly the most fre-

quent cause, and as such, is also the most common cause of prostatic enlargement in the aged.

A. L. W.

A New Method of Skiagraphic Diagnosis for Renal and Ureteral Surgery.

—By G. KOLISCHER, M.D., and L. E. SCHMIDT, M.Sc., M.D. (*Jour. Amer. Med'l. Ass'n.*, Nov. 9, 1901, page 1228).

The authors after extensive studies on the cadaver, have devised a means of identifying the ureters by the skiagraph. They employ a lead wire, blended with some antimony. For locating the ureteral orifices, they employ Brenner's cystoscope, though in some cases an improved modification of Casper's cystoscope was used. The wire used is very flexible, so that the natural course of the ureters is not changed by the introduction of the sound. The surface is highly polished up to perfect smoothness, making injuries to the ureter almost impossible. Only excessive force will change the direction and curve of the ureter, when introducing this sound, while on the other hand, the wire is sufficiently strong not to be torn by its movements through the canal of the cystoscope.

A number of interesting pictures are presented which must be seen to be appreciated. The wire is seen very plainly, and must be of great value in determining the site of stones and other kidney conditions. In a dilated pelvis the wire is seen to coil upon itself, thus outlining the pelvis quite distinctly. A case of cicatricial distortion and partial obstruction of the ureter, after a railroad accident causing fracture of the pelvis, distinctly shows the seat of the obstruction at the point beyond which it was impossible to push the wire any further. A stone in the parenchyma of the kidney is also well shown in another picture. The distance between the tip of the wire and the stone in the kidney, indicates the distance from the kidney pelvis to the stone itself. Two pictures show a floating kidney in a woman, in its usual position, and after being pushed down by the hand. The rotary dislocation of the organ is also well shown. A. L. W.

The Present Status of the Bottini Operation as a Method of Treatment in Obstructive Hypertrophy of the Prostate Gland, Derived from a Summary of 888 Operations by 48 Operators.—By ORVILLE HORWITZ, M.D. (*Phila. Medical Journal*, Nov. 16, 1901).

Horwitz is of the opinion that prostatic hypertrophy begins at a much earlier age than is usually supposed, though obstructive symptoms may not appear for some time later. Those patients who suffer from the "breakdown in catheter life" soon lose their resisting power from pain and loss of sleep; in these cases the sooner a radical or palliative operation is undertaken, the better. Delay is dangerous, and an early diagnosis of the true condition is imperative.

The Bottini operation is the safest and most satisfactory, and at the same time more generally applicable to the different forms of prostatic enlargement than any other method of treatment hitherto devised. To those accustomed to the use of urethral instruments, this operation is not a "blind" operation, as it has been termed. If previous to the operation the urethra has been examined, its length determined, the size and contour of the prostate defined by means of the stone-searcher and the cystoscope, together with rectal examination, and a knowledge of the condition and the capacity of the bladder, the operator has data to guide him which make the operation one of exactness. He may feel certain of making an accurate cut of the length required in the desired location.

There is less fear on the part of the patient to submit to this operation than there is to any other surgical procedure so far suggested for the relief of prostatic hypertrophy. The principal advantages to be derived from this method of treatment are: 1. A short time only is required to perform the operation, which is attended with little shock and unusually slight loss of blood, convalescence is rapid, and the mortality is lower than that of any other radical measure. 2. Cures result in the great majority of cases, especially if the operation is undertaken early. Marked improvement may be looked for in a vast number of cases where otherwise individuals would be condemned to suffer, as the danger attending any of the other radical methods of treatment would be too great to warrant their employment. 3. Failures occur in but a comparatively small percentage of cases, want of success being due to the pathological changes and complications which have taken place. Especially is this true in those instances where an incurable cystitis exists.

The operation is contraindicated where a valve-like formation exists, or where there is a greatly increased overgrowth of the three lobes, associated with tumor formation, giving rise to a pouch, above and below the neck of the bladder. It may be employed with safety and benefit, as a palliative measure in cases of prostatic hypertrophy of long standing, associated with cystitis, when the general health will be improved, and constipation, which is usually associated with this condition, relieved, mitigating the prostatic spasm of the urethra, and rendering the insertion of the catheter easy and painless.

Pyelitis when present, adds greatly to the danger of the operation, but is not always a contraindication to its employment. The character of the prostatic growth has but little bearing on the result of the operation. The operation may be employed as a safe and satisfactory means of causing a suprapubic fistula to close, which so frequently follows a suprapubic cystotomy, when the prostate gland is hypertrophied.

In suitable cases it is not only the best radical measure thus far devised for the relief of prostatic hypertrophy, but is attended with the smallest mortality. The operation is especially indicated in the beginning of obstructive symptoms due to hypertrophy of the prostate gland, and may be regarded as a prophylactic method of treatment. It is capable of producing a systematic cure in a great number of cases of various conditions and configurations of the prostate gland due to hypertrophy, as is shown by the disappearance of prostatic spasm, the restoration of the function of the bladder to its normal condition, and the improvement of the general health.

When operating early, before the prostate has become much enlarged, the safest method to pursue is to perform a preliminary perineal cystotomy, introducing the "perineal galvano-cautery incise" of Chatwood, so as to make the incision in the prostate. In some cases a long preparatory treatment is necessary before the operation can be safely undertaken. In cases of prostatic obstruction, which have existed for a lengthened period, where there is chronic cystitis, the physical condition being below par, both local and constitutional treatment must be persisted in for months after the operation, before the great benefit derived from the procedure can be assured, which treatment would be ineffectual unless the obstruction had first been removed.

A. L. W.

Vesical Emergencies; Their Surgical Management.—By EUGENE FULLER, M.D. (*N. Y. State Journal of Medicine*, Dec., 1901, page 322).

Fuller discusses at length the conditions upon which depend the great majority of vesical emergencies requiring surgical attention. Most of these emer-

gencies depend upon retention of the urine. Usually the service demanded, the necessity of emptying the bladder, is self-evident to the surgeon, but where the advent of the retention has been insidious, and the vesical function has failed as a result of great bodily prostration consequent on obstruction to the outflow, or nervous failure, the wrong diagnosis may be made, and in a measure, this surgical mistake may even be palliated. Chronic retention, as the result of traumatism, surgical shock, prostatic obstruction, or the severe febrile disturbances, should always be borne in mind, even though the patient does not make evident to the surgeon what the trouble is by frantic and ineffectual attempts to empty his bladder. Passive dribblings of urine from the meatus, wetting the bed or clothing, and the discovery by abdominal palpation of the hypogastric tumor resulting from the distended bladder, are sufficient to lead to the proper diagnosis.

Cases of vesical retention are divided into two classes, those amenable to catheterization, and those that are not. When one encounters a case of retention where traumatism, the result of external perineal violence, is not the evident cause, the first and almost natural surgical indication is to pass a catheter and draw off the accumulation, under proper antiseptic precautions. Tenesmus and spasm of the deeper parts of the urethra should never be met by force. The soft catheter, though practically harmless in these cases, is rarely of use, owing to its being too soft. The gum elastic olivary pointed catheter is the most reliable, especially in cases of stricture. Force may only be used after the point has passed the stricture and the neck is engaged. Where olivary pointed catheters fail, recourse is had to whalebone filiform bougies. When a bougie cannot pass, there is a complication to account for it, as a false passage, or secondary traumatic or inflammatory changes that have caused a disorganization of the part. Cocainization of the deep urethra, or general anesthesia removes the element of spasm from consideration.

For prostatic hypertrophy, with impingement on the floor of the prostatic urethra by the hypertrophies, the blunt or olivary-pointed silk woven catheters may pass; if not, the elbow catheters must be employed, and as a last resort the silver catheter with prostatic curve. But it may be said that whenever the obstruction is so grave as to require the use of the silver catheter, a prompt resort to radical surgical measures is indicated.

Where catheterization cannot be employed, the urine must be made to escape through an incision, either by the perineal route, or the suprapubic cut. The former is chosen in the majority of cases. When retention is complicated by perineal gangrene and suppuration, the indication is to drain the bladder and the perineum as quickly and as thoroughly as possible. If there has been burrowing, the median perineal incision should be extended laterally and freely, so as to free the ischiorectal or scrotal or other regions affected, from all pent-up secretions. Pay no attention to the deep urethra at this time. Then open the bladder suprapubically and drain. After two weeks, when a healthy granulating surface has taken the place of the perineal gangrene and slough, a secondary perineal operation for the relief of the urethral obstruction should be undertaken. This method has been met with good results.

Where prostatic retention occurs in cases not amenable to catheterization, prostatectomy should be immediately performed. Where a little delay before operation cannot be avoided, the suprapubic aspirator may be employed to tide over the interval. It is not enough to drain the bladder and leave the obstruc-

tion undisturbed. The operation of prostatectomy adds no material hazard to the relief of the retention, while it saves the patient an operation later. With thorough irrigation at the time of operation, and with the surgical establishment of perfect drainage of the bladder, little general absorption of the purulent vesical contents may be expected. A. L. W.

New Test for Blood in the Urine.—By DR. R. FORSTMANN (*Schmidt's Jahrb.*, 1901, cclxx., 138, 225).

To 10 c.c urine add 1 c.c. ammonium sulphide and as much pyridin. According to the amount of blood present the fluid takes a more or less orange-red color. With a considerable amount of blood this color change is constant. Although it is very sensitive, this color reaction is greatly increased in delicacy by the observation by means of the spectroscope of the hemochromogen formed. The spectrum of the hemochromogen is quite marked, even though no naked eye color reaction can be distinguished.

Another test for blood in the urine is the well-known test of a blue color with tinctura guaiaci and ozonized turpentine. Pus in the urine gives a blue color with tinct. guaiaci without the addition of any oxygen-giving body. As the urine may contain reducing bodies which make the appearance of the blue color difficult, it is best to filter the urine and do the test on the filter. In like manner in leukemia, drops of blood dissolved in water and filtered, give a blue reaction on the filter with tinct. guaiaci. This property of pus, of giving this blue reaction with tinct. guaiaci, depends on the action of nucleo-proteids, and is in all probability to be attributed essentially to the leucocytes, and not to the lymphocytes. (*Bristol Medico-Chirurgical Journal*, Dec., 1901, page 338.) A. L. W.

Cystoscopy and Ureteral Catheterization.—By THOS. CARWARDINE, M.S., F.R.C.S. (*Bristol Medico-Chirurgical Journal*, Dec., 1901, page 303).

Carwardine reports his observations on twenty examinations for obscure urinary and abdominal affections, by means of the cystoscope and the ureteral catheter, the former in both sexes, and the latter in females.

Among the cases examined were a case of tuberculous kidney in which the tubercle bacilli were found in the urine drawn through the catheter; two cases of tuberculous ulceration of the bladder, in one of which the orifice of the left ureter was also ulcerated; a case of tuberculous tumor of the bladder, with symptoms suggestive of vesical calculus, in which the cystoscope was inserted into the bladder through a suprapubic incision, owing to the urethra being too small for the cystoscope to pass through it. In one case of myelitis, previously diagnosed as lumbago, and as renal calculus, the cystoscope revealed numerous deep sacculi and fleshy fasciculi, the former having the appearance of deeply cupped hernial depressions. The patient had been ill for six months and had been unable to hold his water. There were also sharp pains, and attacks of cystitis. He had girdle pains around the chest, Argyll-Robertson pupil, increased knee jerk, but no ataxy.

A calculus undetected by the sound was also seen with the cystoscope, which revealed a light feathery calculus, which sparkled brilliantly like hoarfrost in the rising sun.

The article is supplemented with interesting drawings of the cystoscopic views in every case. A. L. W.

Prostatectomy, The Method of Choice in the Management of Prostatic Obstruction.—By EUGENE FULLER, M.D. (*Journal of the Amer. Med. Ass'n.*, Nov. 2, 1901, page 1,151).

The question of senility is an important one to consider in the consideration of prostatic surgery. Those related to or standing sponsor for the patient base their chief opposition to the operation for relief, on the ground of the age of the patient. The question of operation is rarely brought up before 57 to 60 years of age. In connection with prostatic surgery, a patient under 65 is considered young, and when between 65 and 72 as middle aged. The author's former limit of 75 years he has raised, having operated during the last year on one man aged 78, and on another aged 77, with good results. In those of 75 or thereabouts, if sufficient relief attend the use of the catheter so that life is reasonably bearable, radical operation should perhaps only be urged if there be good reason to suppose that the catheter will in the near future fail to relieve suffering and avert death.

In considering the physical and mental condition of the patient in reference to the question of operation, the existence of arterio-fibro sclerosis should be mentioned as a decidedly unfavorable condition, since chronic interstitial nephritis always coexists. Calcareous infiltration into the walls of the blood-vessels, though not a contraindication, is a bad feature. Antecedent dissipation, existence of pulmonary, cardiac and other defects, are unfavorable factors. Putrid urine and the presence of an ascending pyelitis together with involvement of the kidney, should strengthen the plea for speedy relief from prostatic obstruction, the direct cause of their presence and continuance.

In the majority of cases, the question of procedure resolves itself into that of prostatectomy or nothing. In the minority of cases it may be proper in connection with the question of prostatectomy, to consider the advisability of castration or of the Bottini operation, as substitute measures.

The cases demanding prostatectomy, and in which that operation alone will suffice, are, (1) those not amenable to urethral instrumentation; (2) those demanding vesical or perineal drainage as well as relief from prostatic obstruction; (3) those in which renal infection exists as a complication; (4) all those complicated by phosphatic calculi in which litholapaxy is impracticable; (5) those in which the prostatic mass causing obstruction is such as to require direct removal, not being amenable to less radical surgical treatment.

Where marked vesical lesions are developed as a result of the long struggle of the bladder to overcome the resistance offered by an increasing prostatic obstruction, not only is the removal of the prostatic obstruction indicated, but also vesical rest as well, the latter being obtained only through a combined cystotomy. Periprostatic suppuration and perineal phlegmon due to lesions of the prostatic urethra, resulting from constant catheterization, require perineal drainage. Renal infection is best eliminated through extreme and unobstructive diuresis, which can only be obtained by thoroughly draining the bladder.

All cases of prostatic obstruction accompanied by a surgical emergency aside from that of simple retention, and all cases at all complicated or associated by complications, are suitable for prostatectomy, and that only; while as regards the easier and selected cases other surgical methods might perhaps be tried. Castration for this condition has been discarded by the profession. Relief has followed a few well authenticated cases, but in the author's cases there was no relief, but subsequent prostatectomy was made necessary.

Bottini's operation has one thing in common with castration, which is a great advantage, namely, it is easy of accomplishment, as any one who is at all familiar with the manipulation of urethral instruments is able to properly perform the operation. That is the chief advantage it has over prostatectomy. The avoidance of cutting appeals to many, as does electricity, the agency used. Statistics published by operators who are careful in selecting the cases best suited to the operation show a slight majority of cases relieved of symptoms, while in a fair percentage of the minority, more or less relief of symptoms is noted. In most of the cases operated by the Bottini method, there is always some, and often considerable, residual urine. After convalescence from prostatectomy, as the author performs it, there is no residual urine. The term radical cure should never be applied to a prostatic operation which does not eliminate the element of residual urine. In a good percentage of cases, the Bottini operation even fails to relieve. Its mortality is somewhat under 10 per cent. The cases suited to this operation are those free from the complications above mentioned in which the prostatic obstruction takes the form of a moderate-sized middle lobe or of an hypertrophy and rigidity of the prostatic fibres encircling the vesical neck.

One can never be certain whether or not a given case is suitable for the Bottini operation. In an elderly individual, 75 or over, suffering from obstruction due to a middle lobe of not great size, it might be that in the absence of contraindicating complications, the Bottini operation would be the one of choice.

In prostatectomy the results are permanent, while there are grave doubts on that point as regards the Bottini operation. Weir pointed out 25 years ago, after a thorough trial of the original Bottini method, that in the few cases where improvement followed the operation, the betterment was only temporary. Instead of repeating the operation, as some do, after an unsuccessful first operation, prostatectomy should be resorted to. The author thinks that the reason that the results following the Bottini operation may not show lasting qualities, is in large measure due to the cicatricial contraction which gradually results from the healing of the burnt area. If the eschar be made through the bladder wall and into a projecting middle lobe lying posteriorly to the vesical neck, then it would seem that a good result following the operation ought to show a fair degree of permanency. If, on the other hand, one or more eschars be made through the vesical and prostatic fibres at the vesical neck itself, then it seems that the immediate good result following the freeing of the contraction must be temporary, the resulting cicatrix leaving the part more contracted and rigid than before the operation. In such an instance the fewer number of eschars and the less true destruction of the tissues making up the vesical and urethral wall the better. In the performance of prostatectomy, as advocated by the author, the vesical and urethral structures are left undestroyed, the prostatic obstruction being alone removed; consequently there can be no resulting contraction. Where prostatectomy has to be performed secondary to a Bottini operation, the cicatrix which has resulted from the first operation may increase the difficulty of the second.

He who does only the Bottini operation is a poor adviser, since he has not perfected himself in the performance of prostatectomy, and is consequently not equal to the emergency when the case presents itself which is not suited to the Bottini operation.

The loud cry of mortality raised over the operation of prostatectomy has originated from three sources: 1, from those who know nothing about the operation; 2, from those who do only the Bottini operation; 3, from those who have tried the operation and have failed. From the author's experience, in an otherwise healthy man not over 65, and without urinary infection, the mortality from prostatectomy is not greater than 5 to 8 per cent. From that low level the rate rises, dependent on the combination of adverse conditions which may be present. The operation is admittedly not an easy one. Great rapidity on the part of the operator is demanded. As a rule the author has so far completed his operation that the anesthetic can be discontinued at the end of ten to fifteen minutes, the operation having been commenced the moment the patient becomes fully unconscious, and the last suture is tied as consciousness returns. The wound must be so treated and the drainage tubes so adjusted, that the patient remains comfortable after the operation, and free from surgical ordeals.

A. L. W.

NOTICE.

THE AMERICAN ASSOCIATION OF UROLOGISTS was organized on February 22, 1902, essentially for the purpose of further development of the study of the urinary organs and their diseases. Although most of the founders of the Association are specialists in genito-urinary diseases, membership is not limited to those engaged exclusively in this specialty. Thus gynecologists who embrace renal and vesical surgery in their work are among the founders, as there are several gentlemen who devote themselves to the microscopy and chemistry of the urine, as well as a number of practitioners interested in the study of the kidney from a medical standpoint. The association consists of active, corresponding and honorary members, and is in great measure modeled upon the plan of the Société Française d'Urologie, modified to suit American circumstances and conditions. Thus, whenever possible, the branch associations, throughout the United States, British Possessions and Spanish America will hold their meetings on the same evenings as does the parent association in New York (the first Wednesday in each month). The work of the Association is principally clinical, for the demonstration of new methods of the technique of examination and treatment. The annual meeting of the American Association of Urologists will be held on the last day and the day following the annual meeting of the American Medical Association. The officers of the Association are: Ramón Guitéras, M.D., President; William K. Otis, M.D., Vice-President; John Van der Poel, M.D., Treasurer; Ferd. C. Valentine, M.D., Secretary; A. D. Mabie, M.D., Assistant Secretary.

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Original Communications.

A PRELIMINARY REPORT OF TWO CASES OF CUTANEOUS BLASTOMYCOSIS (BLASTOMYCETIC DERMATITIS OF GILCHRIST).

BY FRANK HUGH MONTGOMERY, M.D.,
of Chicago.

CASE I.—The patient was sent to my clinic, at the Chicago Clinical School, by Dr. William L. Noble, of the Illinois Eye and Ear Infirmary. To Dr. La Force, interne of the infirmary, I am indebted for the following history:

"Mrs. A. M., age twenty-eight; Bohemian; occupation, housework. Father, aged fifty-five, living and well. Mother died of consumption at fifty. Three brothers living and well; five sisters, three of whom are living and well; one died at two years, of pneumonia, and another at seventeen, of consumption. Has had the usual diseases of childhood. No specific history. Married at sixteen. Mother of three children; first living and well; second, died when fifteen days old; third, seventeen months old, living and well. During the latter half of her last pregnancy, had a bad cough and spit up considerable blood. Also during her last pregnancy had an eruption over her body, and in its course an abscess formed in the left inguinal region and another on the right forearm. About the time this eruption disappeared the present trouble commenced, which was twenty-two months ago. The right upper eyelid became swollen and painful. The swelling ruptured just below the eyebrow, and considerable pus discharged. The process gradually advanced from the original site, infiltrating new areas and forming a ridge, cauliflower-like in appearance in places, while other parts were covered with crusts. While the process advanced, it healed

at the original site, leaving a scar tissue. She was treated in the hospital at Joliet last December, for four weeks, with no improvement. Came here December 30, 1900. Condition on entrance: Emaciated and run down. Right eye, marked ectropion, exposing whole cornea. Lower border of upper lid drawn up to the eyebrow. Corneal ulcer from lagophthalmus. Large scar involving right eyebrow and cheek. The process extends across the nose on left cheek, and from the middle of the forehead, just below left eyebrow. Where the process is advancing is a ridge three-eighths of an inch high, cauliflower-like in places, while in other places it is covered with crusts, beneath which a small amount of pus is found.

"No evidence of syphilis or tuberculosis on general examination. Treatment: Potassium iodide 60 gtts. (sat. sol.) t.i.d., increased 2 gtts. daily to 120. Patient commenced to improve at once."

It was exceedingly difficult to obtain a satisfactory history from this patient, as her intelligence was of a low order, and, as she did not speak English, all conversation had to be conducted through an interpreter. On several subsequent occasions, however, she was carefully questioned in an effort to learn the nature of the eruption and the abscess above mentioned as occurring during her last pregnancy. Although her statements at different times varied considerably regarding the time of appearance and duration of the eruption, she always declared that it had itched very much, and that it had been better at times and worse at others, sometimes nearly disappearing; that it was usually dry, but after scratching more than usual there would be moisture and crusting. The abscesses were evidently of brief duration, and were probably due to a local pus infection following traumatism with the nails, as the patient was not cleanly in her habits and her hygienic surroundings were poor. The scars left by the abscesses are irregular and insignificant, and do not suggest either syphilis or tuberculosis.

On examination January 30, 1901, it was seen that the disease involved the following areas. There is marked ectropion of the right eye, the lower lid being destroyed, and the upper everted and its lower border attached to the eyebrow. The cornea is entirely exposed, and the seat of ulceration. The sight is destroyed. Surrounding the right orbit is a sharply-defined area, for the most part about an inch in width, of soft, smooth, pinkish-white scar tissue. The upper two-thirds of the nose and the inner canthus of the left eye are covered by the same sort of a scar. Active areas of the disease are present as follows: An irregularly circular, verrucous ridge occupies the middle third of the lower half of the forehead, from which a branch extends horizontally along the middle of

the upper left eyelid. An irregular ridge, varying in height and width, extends nearly horizontally along the middle of the right cheek, over the nose, just above the tip and alæ, which are spared, and terminates half an inch below the middle of the lower border of the left orbit. These active areas are elevated from one-eighth to a quarter of an inch, are papilliform and verrucous in character, and covered in places with more or less bulky crusts. A few portions are fairly firm and dry, but most of the areas have a soft base, and slight pressure causes pus to ooze up between the papilliform projections. The outer border of all the lesions is sharply defined, but separated from the normal skin by a sloping, purplish border, an eighth to one-fourth of an inch wide, in which are seen miliary abscesses. On being opened, these minute abscesses give exit to viscid muco-pus.

The scar of the older lesions is soft, smooth, supple, and not attached to the deeper tissues. The more recent scar below the right orbit and in the clearing area on the forehead is thick, firm, somewhat irregular, and, on close inspection, is seen to contain a few miliary abscesses like those of the violaceous border surrounding the active lesions.

Pus from the abscesses, and scrapings from the interior of a soft nodule, examined in a solution of potassium hydrate, showed characteristic round, highly refractive bodies, with the double-contoured capsule, and, for the most part, a granular protoplasm. Budding forms were present, but no mycelium.

The treatment instituted by Dr. Noble was continued and the patient kept, with a few brief intermissions, on one hundred grains of potassium iodide three times a day. She was also given tonics, and the surface covered with a wet boric-acid dressing. The lesions rapidly disappeared, until, on May 20th, neither papilliform elevations nor miliary abscesses could be detected. All but the most recent portions of the scar had become smooth, soft, and non-attached. She was advised to continue treatment until all this scar tissue had disappeared, and then to have an operation to overcome the ectropion.

Histopathology.—With a few minor exceptions, the tissue changes are the same as those described in Case II. The small piece of tissue was taken for examination from a part which was healing under the influence of potassium iodide, and included but a small portion of the active verrucous border. The sections consequently show some scar tissue, less epithelial hyperplasia than in Case II., but few of the characteristic abscesses, and less evidence of acute inflammation, but more and larger giant cells than in Case II. The organisms are not numerous. They average about 10 μ . in diameter, and have the usual double-

contoured, resistant capsule and granular protoplasm. Budding forms are seen.

Cultures.—Scrapings from one of the small nodules, the surface of which had been cleansed with alcohol, and pus from miliary abscesses were used to inoculate different media at different times. On several media a mould fungus developed in from three to seven days. The fungus grows readily on almost all ordinary media, of which glycerin and glucose agar seem to be, on the whole, the most satisfactory. The following description refers to the growth on these two media:

The original cultures appeared as round, slightly radiating or stellate colonies of a white, fluffy growth, showing short aerial hyphæ, also similar hyphæ extending into the media to a depth of one one-eighth or a quarter of an inch. After several weeks the cultures became slightly yellowish or yellowish-brown in color. Subcultures appeared in two forms, the majority having the same characteristics as the original culture, except that the tendency to penetrate the media was less apparent, and in the third generation was lost entirely, though the colony in every instance is intimately and firmly attached to the media. A few of the cultures were like the original, except that instead of being fluffy with aerial hyphæ they were moist and slimy in character, in two instances having a very light, yellowish-brown color from the beginning. These two cultures showed at the center a slightly granular appearance. At the end of four weeks this granular center was raised a quarter of an inch, and from it there extended to the circumference irregular but smooth folds and grooves, suggesting some colonies of the trichophyton.

The variations here noted are similar to those seen in other fungi, and may have been due to slight differences in the media or in other conditions. It is possible also that in this (and in other cases previously reported) there is more than one variety of a given species of fungus present.*

Under the microscope the fungus, both from the dry and from the moist colonies, presents fairly uniform pictures. Colonies but two or three days old show chiefly a fine, tangled mycelium, the hyphæ being very long, straight or slightly curved, and either homogeneous or showing a few refractive granules scattered through the center. Few branches at acute or nearly right angles are seen. As the colony grows older, the mycelium becomes thicker and shorter, shows a distinct capsule and segments of varying length, in each of which are seen one or several spore-like bodies. After a varying period of time—ten to twenty days—long filaments are very few, the growth consisting of

* A systematic study of this organism and of those in several other cases is now in progress and will be reported later.

short, jointed mycelium, varying greatly in size and shape; of pods of various shapes and sizes, and of round, ascus-like bodies described in the next paragraph (Fig. 1).

In original cultures the older portions of mycelium showed sessile or pedunculated, circular, double-contoured bodies (ascus-like), containing from three or four to a dozen highly refractive spherical bodies of fairly uniform size. For convenience in description, these are here termed "sporules." No free cells were visible during the first two

FIG. 1.

weeks. At the end of six weeks one of the original cultures showed free circular bodies, with double-contoured capsules, and filled completely with "sporules." In the subcultures a few ascus-like bodies attached to the mycelium are seen within three days after the appearance of the growth. They gradually increase in number and in size, and send out variously shaped buds or projections, both before and after becoming detached, which develop into short, thick, segmented conidia, more or less filled with "sporules." The circular bodies gradually increase in size and in number, the majority of them being filled com-

pletely with "sporules." Some of these, however, contain from one to three or four larger circular, oval, or irregularly shaped bodies, the shape of which can be made to vary by pressing on the cover-glass of a moist preparation (Fig. 2).

In two or three cultures, that have been examined also by Dr. Hyde and Dr. Ormsby, the older capsules—or ascus-like bodies—have become partially or entirely empty of sporules, the latter appearing in groups outside the capsule, the number outside corresponding to the number that would be necessary to fill the capsule. In several instances the sporules, both within the partially filled capsule and without it, have exhibited Brownian movements. Rupture of the capsule with escaping sporules has been demonstrated in two short pods only, but prolonged observation of hanging-drop has not yet been successfully carried out.

Case II.—Mrs. M., æt. fifty-one, consulted Dr. Hyde February 12, 1900. The patient is a German woman in good general health, and of good habits. In a carefully obtained family and personal history nothing could be found suggesting previous or present syphilis, tuberculosis or malignant disease. She has had seven children, the third and the fourth dying in infancy from acute disease, the exact nature of which she did not know. She is unable to throw any light on the cause of the present disorder of her skin.

Her cutaneous disease began in January or February, 1898, as a small red spot on the back of the hand, over the head of the first metacarpal bone. The spot became slightly swollen, and upon it developed a pimple, which in a short time became a pustule. This ruptured, and formed a crust. Other pimples and pustules appeared and spread, until in the course of six or eight months nearly the whole dorsal metacarpus was covered with a somewhat swollen and irregularly crust-covered surface which was more or less infiltrated with pus. In about a year from the time of the appearance of the first lesion healing began in the center, while the disease was yet extending peripherally, and has slowly and steadily progressed up to the present time, until all the involved surface except three small areas is replaced by soft scar tissue. Six months prior to this examination, a new area appeared on the flexor aspect of the wrist, on the radial side, and a few weeks ago a small lesion on the ulnar side. The patient says that during the past two years "pimples" have appeared from time to time on the forearm. These disappeared, however, without treatment, and without leaving either scar or persistent pigmentation. She states that none of the lesions have ever been more than slightly painful, though they are sensitive to the touch.

On examination, there is seen on the radial side of the flexor aspect

of the forearm, about an inch above the wrist, a lesion roughly circular in form and nearly an inch in diameter. A second lesion, about a quarter of an inch in diameter, is seen near the first, on the ulnar side of the forearm. Three irregularly oval or circular lesions, varying in size from a half of an inch to an inch in diameter, are seen, respectively, over the proximal and distal extremities of the first metacarpal bone and over the distal extremity of the fifth metacarpal. The larger lesion on the forearm is irregularly elevated from a fourth to a quarter of an inch above the epidermis, and is bounded by a reddish-purple areola, which slopes off to the normal skin. In this areola are seen a number of minute, deep-seated abscesses, barely visible to the unaided eye. The lesion itself is covered with an irregular, bulky, dirty, tenacious, closely adherent crust. On removal of the crust, the surface beneath is seen to be made up of many papilliform, verrucous elevations, which are intensely red, and bleed easily. If these papillæ are clipped off with the scissors, free hemorrhage results. In the clefts or depressions between the papillæ there is a collection of pus, which is very readily increased in amount by a slight pressure on the mass, the pus oozing out from the beneath the surface. The lesions on the dorsum of the hand are very similar in character to the one above described, all presenting the elevated, papilliform or verrucous surface, covered with a crust, and surrounded by the sloping violaceous border, in which can be detected miliary abscesses.

The scar left on the dorsum of the hand is soft, supple, non-attached to the deeper tissues, lighter in color than the normal skin, and, in general, smooth. The whole is traversed, however, by a close network of fine lines of whiter, denser, scar tissue, producing to the eye a cribriform appearance, which can also be detected on delicate palpation.

Examination of Fresh Specimens.—Pus from the minute abscess in the areola, also pus expressed from the base of the ulcer, as well as some of the verrucous tissue and crusts, were mounted in a strong solution of potassium hydrate and studied. In pus from the abscesses and in the tissue characteristic spherical, resistant cells were seen, having a double-contoured capsule and central protoplasm. Many budding forms were present. Some of the cells contained vacuoles, while a number contained several highly refractive globular bodies. The diameter of the organism averaged about $9\ \mu$.

The woman was put on the iodide of potassium, with the result that the progress of the disease was arrested and portions of the active lesions were slowly transformed into scar tissue. She was unable, however, to take the iodide in larger doses or in moderate doses regularly,

and fifteen months after beginning treatment a few small, active lesions were left.

Histopathology.—In the essential features this case corresponds with the published cases of this disorder, the following points being especially conspicuous: The surface is markedly irregularly papilliform. The rete is the seat of extensive hyperplasia, sending down processes deep into the corium. These epithelial processes are exceedingly irregular in size and shape, and send out branches in all directions. They also contain many of the characteristic miliary abscesses. The corium is the seat of a more or less diffuse cell infiltration, distributed through the upper two-thirds of the corium, and extending in places to the subcutaneous tissue. This cell infiltrate is very much intensified in certain areas, which, however (aside from the abscesses), are not distinctly circumscribed. A slight amount of infiltration is found at some distance from the areas chiefly involved, and is seen especially about the vessels.

The histological features in greater detail are as follows:

The surface is more or less covered with blood, exfoliated cells, and amorphous matter.

The horny layer varies greatly in thickness, being entirely absent in places, and consists for the most part of loose lamellæ. In many of the deeper cells nuclei are present.

The stratum lucidum is wanting.

The stratum granulosum is wanting in places, and in others varies in thickness from one to four layers of cells.

The rete is the seat not only of the hyperplasia above described, but also of edema, both inter- and intra-cellular, in consequence of which the inter-cellular spaces and the prickles are very conspicuous. Besides the presence of miliary abscesses, there is a diffuse infiltration of leucocytes, chiefly polymorphonuclear, between the cells of the rete. The abscesses are characteristic of the process, varying in size from the smallest possible accumulation of leucocytes to abscesses large enough to be visible to the unaided eye. They are situated wholly within the epithelial processes, and their walls are made up of flattened epithelial cells. Some of the larger abscesses communicate with the corium or with the surface. The abscesses contain chiefly polymorphonuclear leucocytes, also many epithelial cells of various shapes and in various stages of degeneration, some red blood cells, nuclear fragments, granular debris which takes the stain poorly, an occasional small giant cell, and the organism. The epithelial cells are, for the most part, swollen and edematous. Abnormal cornification is not so marked as in some cases, but does occur in individual cells and in incipient whorls.

The columnar cells of the basal layer are present in all the epithelial processes.

The corium is also the seat of marked edema, and is for the most part decidedly vascular, but where the infiltration is densest the vessels and appendages of the skin have disappeared. The papillæ are absent or distorted. The vessels are dilated; all the coats are thickened, including the intima. The vessels are thus affected where the infiltration is very slight or practically wanting, except for a small number of proliferated connective-tissue cells about the vessels. The coil glands are dilated, and frequently surrounded by infiltrate. In the areas of dense infiltration the collagen and elastin are almost entirely destroyed, a few elastic fibers and an occasional fibrous bundle remaining. There are numerous miliary abscesses.

The infiltrating cells are leucocytes, chiefly polymorphonuclears, plasma-cells and mast-cells. The plasma-cells are most common in the outlying, less acute, areas of infiltration. The mast-cells are numerous, and with the polychrome methylene-blue take the red stain very deeply, in some instances obscuring the granular character of their protoplasm. Giant-cells are small and present in very small numbers, many sections showing none at all, either in the cutis or epithelial abscesses, or in the general infiltration.

The organisms are not very numerous, but are found in pairs and in budding forms in the epithelial abscesses and in infiltrate of the cutis. They have not been found in giant-cells. The organism averages from 8 to 10 μ , in diameter, and possesses the usual double-contoured capsule and a granular protoplasm, which, in some instances, is separated from the capsule by a clear space. One or more vacuoles are seen in some of the organisms.

Cultures.—Different media were inoculated with pus and teased tissue. On two different occasions a pure culture of a mould fungus was obtained from the muco-pus from the smaller abscesses. As is usual in these cases, cultures obtained from teased tissue were contaminated. In gross appearances, and as studied under the microscope in smear and in hanging-drop, this fungus appeared to be very much like that of the preceding case; but, as we did not succeed in growing subcultures, the organism was never satisfactorily studied.

Animal experiments have yet to be made. No tubercle bacilli could be found in sections stained for the purpose.

ACNE AND SYCOSIS TREATED BY EXPOSURES TO ROENTGEN RAYS.

BY WM. ALLEN PUSEY, A.M., MD.,
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OUDIN, Barthelemy and Darier* have shown in studies of alopecia in guinea-pigs, produced by Roentgen rays, that the effects on the epithelial structures of the skin are to increase the vitality of the least differentiated skin elements, while the differentiated elements, nails, hairs and glands, undergo retrogressive changes and atrophy. That these atrophic changes in the appendages of the skin occur is abundantly confirmed in the macroscopic changes in skin exposed for a considerable time to the effect of X-rays. Another property of X-rays is their inhibitory effect upon the formation of pus in the skin. This property of X-rays has been shown in the reports of a number of observers, and the writer has repeatedly seen it illustrated in the cleaning up of ulcerating surfaces exposed to the effects of X-rays. These two effects of X-rays, the atrophy of the cutaneous follicles which they produce and the checking of pus formation, furnish good pathological grounds for suggesting *a priori* the use of the agent in the treatment of acne. My observations upon this subject were first made in cases having slight acne, which were under treatment primarily for hypertrichosis. Following this hint, I began, in August, 1901, to treat intractable acnes by exposures to X-rays. I have used the method in a number of cases, and the results are, I believe, of interest.

Case I.—Miss A., age twenty-two, black hair, with fair skin. This patient was put under exposures to X-rays in July, 1900, for hypertrichosis. On the chin and around the mouth she had an acne simplex, of moderate severity. The lesions were usually indolent, inflammatory papules, without much induration and rarely with the formation of well-marked pustules. During July, August and September, 1900, this patient was under exposures to X-rays, with a production of some dermatitis, and she has been under similar treatment at intervals during the last year. After the development of the first erythema her acne disappeared, and she has had no lesions within the last year.

Case II.—Miss B., age twenty-six, pronounced brunette. This case

* Monatsheft f. prakt. Dermat. XXV., 9, 1897.

is identical in all essential details with Case I. The patient began treatment January 17, 1901, and has had practically no acne since the production of the first slight erythema, a year ago.

Case III.—Miss C., age twenty-six, with fair skin. Began treatment June 28, 1901, for hypertrichosis. This patient had suffered for a long time from a slight acne about the chin, with a considerable number of comedones and constantly recurring outbreaks of a few indolent, inflammatory papules. She had been more or less constantly under my care for several years for this acne, and I had never succeeded in entirely relieving her of it. Since the production of the first erythema, in September, 1901, she has had no acne lesions.

All three of the above cases have been constantly under observation. They have had X-ray exposures at intervals during the last year for hypertrichosis, so that the effect of the X-rays upon the skin has been maintained. In all of these cases the skin is smooth, soft, and the result is satisfactory from a cosmetic point of view. There is evidently slight atrophy of the skin in each of these cases. In each there has been some pigmentation produced at one time or another by the X-ray exposures, but in none of them has this pigmentation been persistent.

Case IV.—Miss D., age twenty-three, came to me July 20, 1901, for an indurated acne of the lower part of the face and on forehead. I had the patient under ordinary methods of treatment from July 20th to August 26th, in spite of which lesions continued to develop, and on August 26th I suggested to her that we try the effect of exposures to X-rays. She was given exposures to X-rays from August 26th to September 26th, having eighteen exposures in all, with a very weak light, with the tube fifteen cm. distance, and the length of the exposures five minutes. Under these exposures, in the course of two weeks, the disease began manifestly to improve; after a month there were no active lesions left. This patient had no sittings between September 26th and December 21st, and had no local treatment except that she washed her face once a day with a one-half-per-cent. bichloride soap. She returned December 21, 1901, and had daily exposures until January 3d, ten in all, without the production of erythema. She advises me now that there has been no further trouble from the acne. Since she stopped treatment, September 26, 1901, there has been the occasional appearance of a single small papule, but she has been practically free from the disease. Up to the time that the acne was affected by X-rays there had been no time in twelve months when there had not been a crop of pustules or papules on her face.

Case V.—Miss E., age twenty-three, referred to me by Dr. Moreau Brown, of Chicago, with an indurated acne of two years' duration.

This was a typical, very severe, indurated acne, with a great number of deep-seated pustules and many scars. The disease had persisted for two years. She was under X-ray exposures more or less regularly from September 16 until December 30, 1901, receiving in all twenty-nine exposures. On October 8th I made the memorandum, "The acne is certainly improving." On November 11th, after the development of slight erythema, there were very few pustules to be found, and the face was smooth and clean. Since December 1st she has been practically free from all manifestations of acne. The change in this case can hardly be exaggerated. Instead of a wretched, intractable, disfiguring acne, this patient now has a clean, healthy-looking, pink skin. There are, of course, numerous scars left, but no other evidence of acne. This patient, for a short time at the beginning of treatment, used *lotio alba* and a pill of iron, arsenic and strychnine. These had no effect previous to the use of X-rays.

Case VI.—Miss F., age twenty-nine, with a very severe rosacea and many deep-seated pustules and comedones about the nose and flush area of the face. The case presented the picture of a severe acne rosacea of several years' duration, but without hypertrophy. Her health is good, except for constipation, which she had given intelligent care before this treatment began without effect. This case has had exposures from December 9, 1901, to March 19, 1902, thirty-three in all. For a short time she used *lotio alba*, but after the first two weeks of treatment this was discontinued. The result in this case has been the entire disappearance of pustules and comedones since the middle of January. She still has some rosacea, but this is greatly improved and the face is clean, smooth and healthy looking.

Case VII.—Miss G., age twenty, with a sluggish, pasty skin. During the last year she has been annoyed by comedones and a fairly severe acne about the chin and lower part of the face. This patient had seventeen X-ray exposures between December 13, 1901, and January 23, 1902, with almost entire disappearance of the disease. She has still an occasional comedone, but has not for two months had an acne lesion.

Case VIII.—Miss H., age sixteen, with a very severe juvenile acne. It was a typical, very severe, simple acne, with great numbers of comedones, and superficial pustules. The disease had persisted for two years practically unchanged, in spite of constant treatment. From January 2d to date she has had thirty-six X-ray exposures, with a very great improvement in her condition. She still has a few pustules and comedones, but the face has cleaned up in a remarkable way.

Case IX.—Mrs. J., age thirty-five, spare built, anemic woman, with

constantly recurring crops of inflammatory papules about the chin, and a few comedones. She was under my treatment for two months, with very slight effect, when, on January 2d, I began exposures to X-rays. Between January 2d and February 8th she had twenty-seven exposures, with very considerable improvement in her condition. Treatment in this case was unavoidably discontinued. The improvement in this case was satisfactory to the patient, but it was less definite than in any of the other cases.

Case X.—Miss L., age twenty-four. She has had for five years a very indolent, deep-seated acne. The skin was pale and sluggish, and the cheeks were covered with bluish, deep-seated, indolent lesions. The lesions in this case were extremely indolent, but without a great tendency to the formation of pus. She was put under X-ray exposures January 3d, and to date has had forty-one exposures. There are still a few small lesions left, but almost no comedones, and the face is smooth and clean, and of much better color.

Case XI.—Miss M., age eighteen, referred to me by Dr. D. A. K. Steele. Healthy, vigorous young woman, with a moderate but very persistent juvenile acne. There were not many large comedones in this case, but the patient had constantly recurring crops of indolent, inflammatory papules, without much elevation, and very slow to disappear. This patient has been in the hands of many excellent dermatologists, without at any time entire disappearance of the disease. She was under my treatment for five weeks without material change. She was then put under X-ray exposures, between January 10th and February 27th having twenty-five sittings in all. By February 17th she showed slight pigmentation; there were then no acne lesions present, and only a few stains. Since that time there has been constant improvement in her condition. She has had no lesions develop during the last month, an experience that she has not had before within two years. The slight pigmentation has disappeared, and the skin is perfectly smooth and healthy looking.

The physical condition of these patients was about such as one usually sees in these cases, digestive disturbance in some of them, and some of them anemic. The only one of them that showed any marked departure from health was Case X. This patient has a moderate chronic diarrhea, and for several years has been very anemic. At beginning of treatment she showed 50 per cent. hemaglobin. This patient has had at the same time internal treatment along usual lines, with only slight improvement in her physical condition. Excepting this one, these patients have had practically no internal and no local treatment while under exposures to X-rays.

The above are consecutive cases, and the results are unique in my experience. The results are so direct and so constant in all of the cases that I think there is little room for doubt that they must be attributed to the effect of the rays. In no case thus far that has been under treatment long enough to expect results have I failed to be able to see a beneficial effect from the treatment. If any conclusion may be drawn from so small a group of cases, the method is an advance over any other way of treating acne with which I am acquainted. Of course, it is not suggested that this method should be used to the exclusion of other aids in the treatment of acne. I have avoided opening pustules and giving the patient antiseptic applications or other local treatment, and have also, as far as possible, avoided giving any internal treatment, in order that the effect of the X-rays might be as conclusively shown as possible, but there is, of course, no reason why these patients should not have the benefit of other procedures in their treatment, while still having the exposures to X-rays.

The indications to be met by the use of X-rays are to cause atrophy of the dilated sebaceous follicles and the prevention of pus formation. In no case has there been any undesirable effect on the skin. The skin is left smooth, soft, and clean looking. I have, in one or two instances, seen pigmentation which persisted for a few weeks, but never any that caused serious annoyance. Occasionally the erythema has been quite noticeable for a few days.

There is no other affection which I have undertaken to treat with X-rays that has proven so tractable as acne. The results have been produced quicker, and with less effect upon the tissues that I should have imagined was possible when I first undertook the treatment of the cases.

All of these cases I have exposed to a very weak light, using a fairly soft tube and as weak a current as would illuminate the tube. These cases have proven more susceptible to the effect of X-rays than the average. The treatment has in each case been stopped at the first sign of pigmentation or erythema, and in no case has improvement failed to appear simultaneously with the development of these evidences of the effect of the X-rays upon the tissues.

Of course, in treating a cosmetic difficulty like acne, the greatest caution must be used to avoid untoward effects, and the susceptibility of these patients to X-rays has been so marked in my experience that I do not feel like recommending the treatment without a warning against the use of anything but the weakest light in carrying it out. A light that is just sufficient to show as a faint green glow in the tube has, in my experience, proven entirely effective. I am sure that such a

light, when used with caution, is perfectly safe in these cases, but I think that if they are exposed to a strong light it should be with the very greatest care.

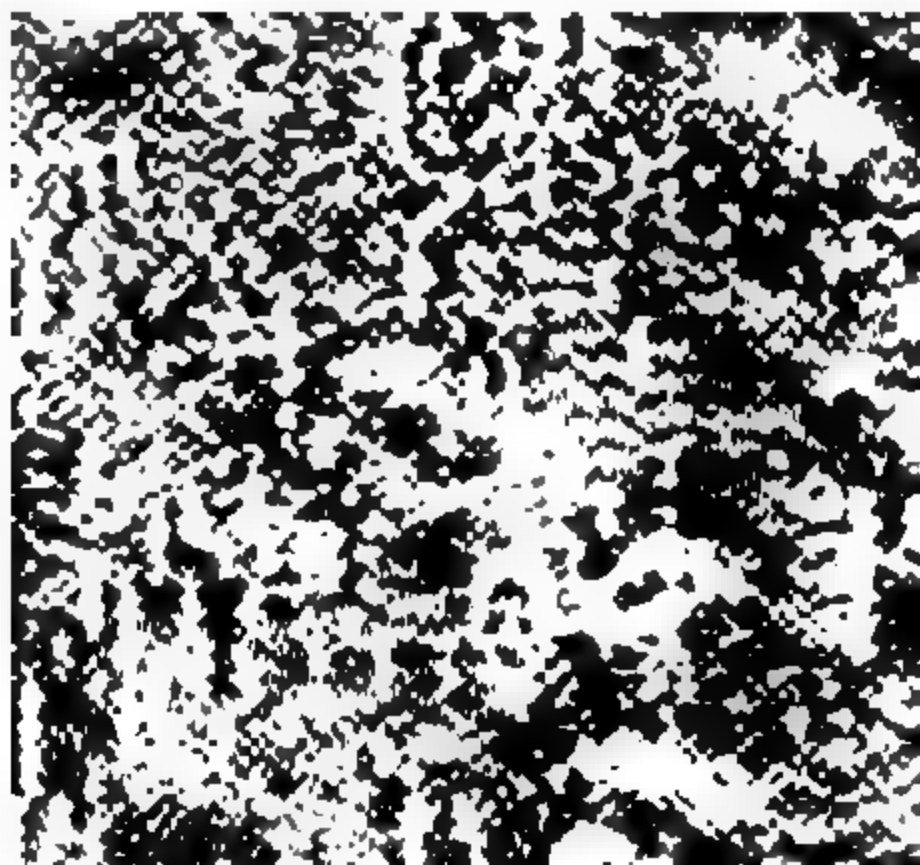
In this connection I wish to report a case of sycosis, because the same two properties of the rays of inhibiting the formation of pus and causing atrophy of the follicles of the skin come into play.

FIG. I.

Man, age thirty-five, street-car driver, referred to me by Dr. Henry F. Lewis, of Chicago. His condition at the time he came under my care is shown in the accompanying photograph (Fig. 1). The case was a simple sycosis of moderate severity; there was no ringworm fungus present. The skin was indurated and boggy, with gaping hair follicles filled with pus, and at one point there was a mass of exuberant granulations forming a tumor the size of a mulberry. The disease had persisted for eight months in spite of vigorous local treatment. The case was given no local treatment, except that the patient was told to wash off the surface twice a day with soap and water and to protect it with

cloths spread with boric-acid vaseline. He was put under X-ray exposures November 4th, but there was practically no improvement up to the middle of January. At that time a very slight dermatitis was produced. The sittings were cautiously continued until the dermatitis became rather acute, and on January 23d they were discontinued. By February 1st there was complete alopecia over the exposed area. After

FIG. 2.



the appearance of the erythema there was rapid improvement in the sycosis, and by February 1st all evidence of disease had entirely disappeared. The mass of exuberant granulations referred to above had shrunk until it was almost on a level with the skin, and was covered with healthy epidermis. The condition since February 1st is shown in the accompanying photograph (Fig. 2). He has had no lesions since that date. The skin is smooth and soft, and healthy looking, but the hair has not yet reappeared.

65 Randolph Street.

A PLASTIC OPERATION FOR A NEW SCROTUM, WITH
REPORT OF A CASE OF GANGRENE AND SLOUGH
OF THE INTEGUMENT OVER THE EX-
TERNAL GENITALS.*

BY RAMON GUITÉRAS,
New York.

A G. Age, twenty-five. Single. Laborer. Was admitted to my service at the City Hospital, May 7, 1900. He stated that he was well up to two years ago, when he contracted a urethritis that lasted up to five months before his date of entrance. Three months later, a swelling of the external genitals appeared, accompanied by pain and redness. The condition grew rapidly worse and the skin over the genitals became black in color, after which the skin dropped off, leaving the genital organs exposed. He said that during this time he had frequency of urination, but no other symptom, excepting pain and swelling, followed by the gangrenous sloughing just alluded to.

Examination.—The external genitals looked red and raw. The penis had no integument over its lower surface and sides, while on the dorsum it was uncovered from one inch behind the corona to the pubes. The scrotum was entirely absent and the testes were bare and drawn up towards the pubes closely, resembling two large cherries, and were covered with a sticky exudate. The line of slough was irregular.

Operation.—A plastic operation was performed, which consisted, first, in trimming the irregular edges caused by the slough, over the pubes, the sides of the thigh and the perineum, then dissecting two oval flaps about two and a half inches long and one and a half inches wide from either side above the pubes in the inguinal region, and two more of similar size from the inner side of the thighs in the region of the adductors as in Fig. I. These flaps were then brought down and sewn together, as is illustrated in Fig. II., covering the testes in a manner somewhat resembling the covering of an old-fashioned baseball. A few small grafts were then taken from the sides of the thighs and

* Read before the Harvard Medical Society of New York, on Saturday, January 25, 1902.

placed upon the raw surface of the penis. The new covering and the grafts held successfully, and, saving a slight leaking where the flaps came together in front of the scrotum and in the perineum, the re-

FIG. I.

covery was uneventful and the patient left the hospital with his external genitals intact.

This case was reported afterwards at the Academy of Medicine at

FIG. II.

the Genito-Urinary section, but at that time I had no details as to his previous condition. The patient had stated that his sickness had originated when working in Fishkill-on-the-Hudson. After extensive

correspondence with the physicians of that place, I finally obtained some information regarding his condition before he entered the hospital and I will quote the following from letters received from Dr. John W. Atwood and Dr. George H. Williams of Fishkill. Dr. Atwood wrote as follows: "The Italian concerning whom you have written was brought to my notice in a shanty in one of our brickyards. He was suffering from an enormously swollen scrotum, pain, and delirium. I placed him in the charge of Dr. Williams of the Fishkill Hospital." Dr. Williams wrote: "The Italian mentioned in your letter was referred to my service in the Fishkill Hospital by Dr. Atwood. There was an enormous enlargement of the external genitals, which were black in color, the scrotum being as large as the head of a baby six months old. I made an incision through the prepuce, together with twenty or thirty punctures into the engorged penis and laid freely open the tissues of the scrotum, after which I dressed the entire mass with a charcoal poultice. A sloughing process ensued that extended over three or four weeks and was associated with a number of abscesses on the sides of the thighs and legs. The patient's general condition was bad and supporting and tonic remedies were given internally. Six weeks after admission, the integument had entirely sloughed away from the organs. It was thought at the time that it was a case of extravasation of urine, but a catheter was never used, nor had he any difficulty in passing his urine after he came under my care."

It will thus be seen that, although we have learned the condition of the patient before he reached the City Hospital, not much light can be thrown upon the cause of the gangrene. It seemed to me that it must have been due to an extravasation of urine, although on entering the hospital he had no urinary leakage nor had he any when under the care of Dr. Williams. Of course, there are numerous other conditions which might give rise to gangrene, such as traumatism occurring in diabetic subjects; but in this case there was no diabetes. I have also seen gangrene of the scrotum in patients suffering from alcoholism associated with nephritis or tuberculosis—none of which factors were here present. Cases have also come under my care of phagedenic chancroid, in which a great part of the external genitals were gangrenous, but in such cases the process was more extensive, and a part of the deeper tissues were involved as well. I remember a case of phagedæna in a woman, in which the process lasted but two weeks, and yet both her external and internal genitals and peritoneum were involved, and the patient died of a gangrenous peritonitis. I have also seen cases of gangrene of the scrotum associated with inflammation of Cowper's glands, in which cases the perineum was ex-

tensively involved, but I have never seen cases of gangrene corresponding exactly to this one excepting those due to extravasation of urine.

The report of this case has a special interest to surgeons and more particularly to those living in the tropics, on account of a disease quite prevalent there, namely, elephantiasis of the external genitals. This condition is quite prevalent in the West Indies and Windward Islands, and it has been my privilege to have seen two such cases operated upon by removing the entire integument from the penis and scrotum, after which the surfaces were allowed to gradually heal by granulations and by skin extensions from the tissues of the thighs and pubes.

It will be seen that such a covering is inferior to the plastic one which I have here described; for after healing by the granulation process the tissues are so bound together that they are as held in a vise and their mobility and elasticity are seriously interfered with.

75 West Fifty-fifth street, New York.

TWO CASES OF RARE BROMIDE ERUPTION.

By T. F. WALLHAUSER, M.D.,

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MISS R. H., age fifteen, native of Austria, was in good health until May, 1895, when she received a slight injury to her right index finger, from which time her illness dates. She became melancholy; this condition being followed by violent fits of hysteria, for which she received bromide of potash in ten-grain doses every three hours. The eruption located on both lower extremities appeared about the third week of treatment as small vesico-papules, oozing and drying in yellowish green crusts surrounded by a zone of inflammatory redness. The papules were disseminated and grouped, running together in places to form large patches. The crusts were very characteristic, yellowish green in color; in thickness varying from $\frac{1}{16}$ to $\frac{1}{4}$ inch, irregularly circular in outline. The surface was traversed by deep sulcated lines, especially marked where patches formed. On removal of the crusts which were firmly adherent, there

presented numerous bleeding points corresponding to the papillæ, which were greatly hypertrophied.

CASE I

Case II.—Mrs. P., age thirty-six; has been subject to attacks of epilepsy for several years, for which she has been taking a proprietary

medicine. The eruption appeared about one year after beginning this treatment. She was treated by her family physician about six months, when she came under my observation. The lesion, which is extremely painful, is located on the lower extremity below the knee, and involves almost its entire circumference. It presents numerous fungating masses, limited to the border. The central portion of the lesion is pigmented and composed of numerous smooth rounded papules, mark-

CASE II

ing the site of previously existing fungoid masses. On the outer edge of the border and immediately outlying are numerous superficial vesicular and pustular lesions in various stages of formation, which mark the character of the formation of the patch. They begin as small pin-point vesicles, generally around hair follicles, and enlarge to about the size of a split pea or more, becoming purulent as they advance. On rupturing the enlarged papillæ are seen, which continue to enlarge, taking on the character of a granuloma. This process is continued for a period of from four to six weeks, when resolution begins, as a shrinking of the fungoid masses. The epidermis finally

covers the enlarged papillæ, forming the papules seen in the center of the patch. In some portions of the lesion these papules have entirely disappeared, leaving the skin smooth and shiny.

In looking up the literature on this subject, I was unable to find a case which would correspond in clinical description with either of the above cases, although I feel that they belong to the class of cases described by Chalmers, Sequin, Amidon, and others. Described under the various titles: "Confluent Acne," "Ulcus Elevatum," "Epithelial Ulcer," etc., the primary lesion in all these cases consisting of a vesicle forming a pustule with hypertrophy of the papillæ. The difference consists mainly in the clinical picture, which varies according to the predominance of any of these three conditions. Case II. must be considered as instructive from a clinical standpoint, on account of the opportunity afforded in observing the growth of the lesion by peripheral extension, which continued some time after the bromide was discontinued.

The treatment consisted in keeping the lesions bathed in Ol. Lini. and Aq. Calcis, equal parts, applied on sheet lint, which aided in the removal of the crusts and relieved the pain. Case I. recovered in seven weeks, Case II. in ten weeks, after the bromide was discontinued.

47 New Street.

Society Transactions.

FRENCH SOCIETY OF GENITO-URINARY SURGERY.

FIFTH SESSION.

(*Annales des Mal. d. Org. Génito-Urin.*, 1901, p. 1347.)

(Continuation.)

Sterility in Double Gonorrhoeal Epididymitis.—DR. PAUL DELBET.

There is a prejudice too widely spread that double gonorrhoeal epididymitis brings with it complete sterility. In truth, sterility is frequent, but we must not lose sight of the fact that it is, more frequently than not, easily curable.

In certain cases the marriage of men previously affected with double epididymitis remains sterile because the man has continued to have an imperceptible drop, perhaps without gonococci being apparent, and he has infected the woman shortly after marriage. It is then the woman who should receive attention, as the author has already observed in two instances of this kind.

In other cases it may be indeed the man who is affected, but the fact is rare. Of the cases seen by the author, not one of them has he ever found to be sterile. This is due, in his opinion, to the fact that these were patients whom he had completely cured by irrigations of a chronic urethritis, which was provocative of this sterility. According to his opinion, true sterility occurs only after double epididymitis with enormous swelling, intense pain, in the beginning of the infection, in these cases veritably hyper-acute.

Urethrorrhagia of Hepatic Origin.—DR. NOGUÈS reports an observation of urethrorrhagia anterior occurring in a man fifty-four years old, the subject of hypertrophic cirrhosis with chronic icterus (Hanot's disease). The patient, it is true, had some previous urinary trouble; in particular a vesical infection running back several years, but the canal was perfectly healthy. Moreover the conditions under which these hemorrhages were produced show that they had their source in the anterior urethra only, without participation on the part of the posterior urethra or the bladder. The bleeding was not slight, but a true abundant hemorrhage. Injections of antipyrine in 3 per cent. solution made an excellent hemostatic.

The hepatic origin of this hemorrhage was evident by the appearance, at times of similar accidents from other mucous membranes (epistaxis, stomatorrhagia, hemophysis, hemorrhage from the intestines purpura). The patient died within three months after the occurrence.

New Method of Internal Urethrotomy, without Catheter a demeure; Rapid Dilatation.—DR. H. REYNÈS regards as exaggerated the fear of infection or hemorrhage after internal urethrotomy; he believes with Dr. Villeneuve that after this operation, the catheter *à demeure* can be dispensed with. He employs the following technique, which he has adopted for two years: (1) antiseptis (he uses the sulphibenzoate of soda); (2) incision with the Maison-

neuve; (3) introduction of an ordinary catheter, 17 or 18, and lavage of the bladder with a weak nitrate solution; irrigation of the urethra on withdrawing the catheter; (4) the following *stance* he dilates with the Beniqué sounds, 17, 18, 19, 20, 21; (5) the application of an antiseptic dressing to the penis and glans. During the day the patient urinates without catheter, and applies fresh bandage after each urination. In the evening and day following lavage of urethra and progressive dilatation with sounds; in three or five days, sounds of No. 24 to 29 are used. After this the patient is seen at intervals for examination and dilatation.

DR. NICOLICH has done 500 urethrotomies, and is of an entirely different opinion. He has attempted to do away with the catheter *à demeure*, but with bad results. For the prevention of fever he leaves a catheter *à demeure*; this assures of absence of fever and chills, while the withdrawal leads to this occurrence.

DR. TÉDENAT has done about 650 urethrotomies without a death and without accident. He leaves a catheter in place for twenty-four to forty-eight hours at the most. He makes his incision with the instrument of Civiale. In the thesis of Grégori, we may see that internal urethrotomy is regarded as a dangerous procedure; it is the catheter *à demeure* which has changed this prognosis.

DR. ESCAT saw Horteloup attempt for a year to do away with the catheter *à demeure*; accidents occurred. Patients could not dispense with the catheter *à demeure*, even when their urine was aseptic. Horteloup left the catheter *à demeure* for four or five days. Dr. Escat has seen patients die, because of failure to use the catheter *à demeure*, while with its use internal urethrotomy is always benign. As to immediate dilatation, already presented by Reybard, since forgotten, it had in his hands deplorable results. Slow dilatation besides gives better remote results.

DR. POUSSON agreed with the latter speakers as to the necessity for the catheter *à demeure*. He never failed to have recourse to it himself, and to it he attributed the good results he had had in 400 to 500 cases. He disapproved of intra-urethral manœuvres after section. Internal urethrotomy was one of the most benign operations of surgery, but only when practised under the most painstaking minutiae. These precautions have been formulated by the chief of the Necker School, and it is well to recall them here.

DR. LOUMEAU also spoke in favor of the catheter *à demeure* following internal urethrotomy as a simple procedure, and one assuring security against accidents. He spoke as one who had attempted the giving up of its use, and while, especially in aseptic cases, it could be done successfully, yet every now and then without its use you will have a nasty accident entirely avoidable through its use. He also was against immediate dilatation following urethrotomy.

DR. LE DENTU had also tried latterly to do away with the catheter. He had not had a death in the healthy individual. When he did not use the catheter he would have a temperature of 38° to 38.5° C. on the second day. While there never was an elevation of temperature with the employment of the catheter. It should not be left in over thirty-eight to forty hours, or there would be reappearance of fever. But in the cases of an infected patient it is better to leave it in a longer time. He did not do immediate dilatation, such procedures were dangerous.

DR. NOGUÉS believed that the passage of urine between catheter and canal would not take place in the case of a catheter properly placed.

DR. FRANK recommends, in case of hemorrhage, supra-renal extract. With the endoscope we can note the anemia of the urethra after its application.

DR. REYNÈS wished to reserve his reply until after he had had a greater experience. There was no use in comparing his method by aseptic measures with the results of the pre-antiseptic period and the use of non-sterilized sounds. Done aseptically, his method presented no sort of danger.

DR. ALBARRAN.—We may often do a urethrotomy without accident; but formidable accidents have been noted in patients subjected to urethrotomy and not provided with a catheter *à demeure*.

Remote Results of Internal Urethrotomy.—DR. P. GUILLON.—This work was done at the clinic of Dr. Desnos; it covers ten years, during which 248 internal urethrotomies were done without a death. More than 150 have been seen regularly since. In almost all these cases unwilling to undergo subsequent dilatation, a recurrence more or less rapid has been the rule. For the great majority of cases, however, even at the end of ten years, the cure has been permanent, that is the permanent maintenance of the calibre regained has been the rule.

These results are to be attributed rather to the subsequent dilatation than to the method of urethrotomy employed, each one of which has its precise indications.

They always sought systematically the highest dilatation possible for each canal without being able to fix upon a determined size, though 60 Béniqué was almost always attained.

The systematic examination of every case with the bougie à boule was never neglected in order to assume the attainment of the perfect suppleness and regularity of the walls. The importance of this is insisted upon.

The majority of these patients returned regularly for dilatation, above all for the control examination of their canals, at first at close intervals, afterwards at increasing intervals up to a year.

It is in this manner that Dr. Desnos has obtained durable recoveries after internal urethrotomy, a safe operation in his hands, but one always regarded by him merely as a part of the process of dilatation.

Meatotomy with the Galvano-Cautery.—DR. GÉNOUVILLE.—It is often necessary to practise meatotomy, in order to obtain the highest possible dilatation with the Béniqué instruments. Ordinarily it is done by the insertion and see-saw movement with the bistoury; he proposes section of the meatus with the galvano-cautery it being bloodless, less painful, and producing a wound less liable to infection. This last is especially important in the case of the subject of an acute gonorrhea, when the meatus is too narrow to allow free drainage of the secretion from the meatus and a bar to irrigations. In such a case the bloody operation during an acute gonorrhea may be a veritable danger.

The following is the technique: antiseptics and cocainization; separation of the lips with a special speculum, or a pair of hemostatic forceps; then dividing at the meatus with a small galvanic knife. The section is almost bloodless, the sequelæ nil; a small tampon of cotton beneath the prepuce suffices for a dressing, afterwards dilatation is easy; he has seen a patient nine months after such an operation in whom the passage of a large sized instrument was easy.

DR. FRANK prefers meatotomy to avoid hemorrhage; he inserts into the

canal a small metal tube filled with glutol, which is expelled at the first act of urination.

Inflammatory Stricture of the Urethra in Women.—DR. GENOUVILLE.—A woman, forty-six years old, having had a puerperal metritis ten years before, and some time after a urethritis, came to consult for an unnatural frequency of urination and difficulty of urination (requiring considerable initial effort to start the stream). The urethra was strictured; it presented two large bands which allowed 22 olive-tipped bougie to pass. Dilatation with Béniqué sounds, disappearance of the difficulty and the frequency of urination.

This observation shows once more how in women a slight amount of stricture may impede urination, it seems to be due to the relative feebleness of the musculature of the feminine bladder.

Treatment of Incontinence of Urine by Epidural Injections.—DRS. ALBARRAN and CATHELIN.—Fifteen cases, very varied, were treated by epidural injections of serum (15 to 20 cubic centimetres to an injection) or of cocaine 2 per cent. (1 c.c. to an injection). In general two or three injections were made a day's interval apart, and according to the effect obtained they were repeated more or less often; in the majority of cases favorable results were obtained with the first injections. Out of the 15 cases there were only 2 complete failures in the case of urinary tuberculosis; all the others were either cured or materially improved.

The cases were thus divided:

Five cases of nocturnal incontinence in children, of which there were immediate cures from the injections of serum; 2 showed marked improvement after two or three injections, of which the last were with cocaine, 5 milligrammes.

One case of nocturnal incontinence in a neuropathic adult, markedly and rapidly improved.

Two cases of incontinence, the origin of which was undetermined; the first was a case of hemiplegic cured by a single injection, made by Dr. Toupet; the second case was that of a paraplegic with diurnal and nocturnal incontinence lasting twenty months; the injections caused cessation of the incontinence by day, but the nocturnal incontinence persisted.

Two cases of false incontinence (urination almost continuous) and one case of complete incontinence in old women aged 68, 72, and 78 respectively; these patients had patulous urethræ; two were definitely cured, and one had alternating continence and incontinence.

One case was a patient having complete incontinence for eighteen months from vesico-prostatic calculus; following a single injection, the patient remained continent up to the time of his operation, twelve days later.

Three cases had complete incontinence from tuberculosis of the urinary tract. The first patient, since dead, was a case of advanced cachexia, with renal and vesical tuberculosis; failure. The second case with tubercular kidney and bladder was a failure, but after nephrectomy the incontinence disappeared. The third case with genital and vesical tuberculosis had been incontinent day and night for eight months; he remained continent after the injections now for over forty days.

These remarkable results, obtained in cases of such diversity, prove that in the pathogenesis of incontinence of urine, though apparently so dissimilar, there is a common factor: inhibition of the sphincter.

Without being able yet to speak of the value of this method of treatment,

absolutely safe, the authors believe that new trials are justified by the encouraging results obtained.

Purulent and Tuberculous Urines.—DR. NOGUÈS.—Dr. Noguès completes the communication which he made two years before on the same subject, and gives the results of the observations made since that period. There is a certain number of cases of purulent urine in which the most careful search fails to reveal the tubercle bacillus. Clinically, they possess the nature of tuberculosis, and it is the experimental verification of this fact long since maintained by Professor Guyon that Dr. Noguès has furnished by the aid of inoculations upon animals.

Certain precautions and the observance of certain points of technique have lowered the proportion of urines surely tuberculous in which, however, the microscopic examination does not aid us in finding the bacillus. Nevertheless in spite of all precautions there remains a certain number of cases where the direct examination still shows a negative result. In 37 cases in which microscopically neither the bacillus of tuberculosis nor any other micro-organism could be found, inoculations were made upon animals, of this number 14 still gave negative results, while 23 showed positive presence of tuberculosis.

Abscess and Urinary Fistulae.—DRS. HERESCO and S. GALATZI.—Altogether out of 13 cases of abscess and urinary fistula, the authors report success in 12 in which the mode of procedure differed widely one from the other. There is no single treatment to recommend for abscess and urinary fistula. Each case presents particular conditions which necessitate a different technique.

They lay stress on the advantages of the procedure which consists of suturing the urethral walls where the urethral sclerosis is limited, and leaving open the rest of perineal tissues.

Sterilization of Catheters.—DR. FRANK has continued his examinations of silk woven catheters and has shown that now the manufacture of silk instruments does not vary greatly from those formerly made in Paris.

As to the sterilization and the resistance of these instruments to chemical agents, he has made his experiments with steam (Kuttner's apparatus), with the sulphate of ammonia (Enosglük) and with ordinary water.

The catheters sustained very well the sulphate of ammonia, 60 per cent., the steam not so well, and ordinary water very badly. The best method is sterilization with boric aldehyde (Trioxymethelene) applied by Frank in Germany and by Janet in Paris. Frank uses the apparatus constructed by Romanès. He has made bacteriological experiments and has found that we can secure exact sterilization in the case of the narrow channels in the operating cystoscope in ten minutes.

Spermatorrhoea and Its Treatment by Electricity.—DR. D. COURTADE.—Electricity acts best in those cases of spermatorrhoea of neurasthenic origin. It should not be employed in cases with local lesion until these have been cured. Cases of spermatorrhoea with organic affection of the nervous system, may be useful in the beginning.

Operation of the Vas Deferens and Seminal Vesicles.—DR. LE DENTU.—In operation the most important points are free section of the anterior and walls of the inguinal canal, the isolation of the vas without rupturing it wounding the other elements of the cord and above all without the peritoneum; the following of the vas up to the ejaculatory duct, the

separation of the vesicle without grave hemorrhage and without perforation of the peritoneum or of the bladder. The rules laid down by Baudet and Duval on this subject are very precise. As to the epigastric artery, it may be divided with its veins, between two ligatures. The separation of the vas is rendered easy by leaving all the fatty tissue in front and going down to the peritoneum. the vascular hilum of the vesicle may thus be avoided, being in front and to the outside. The hilum is indicated by an aponeurotic bridle extending vertically; hemostasis is made by catching the pedicle between forceps, then placing a ligature around the ejaculatory duct.

This operation is not always easy to execute. In cases where the vas is adherent to the peritoneum, its separation is to be abandoned.

Rectal touch is valuable to ascertain the condition of the vesicle.

In cases of chronic inflammation with adhesions and suppuration, we must abandon the extirpation by the ilio-inguinal route which responds only to simple cases; for the others the author would give preference to the perineal route.

The impossibility of being able to determine the extent of the lesions should make the surgeon very radical.

Extirpation is not a grave operation, but the repair of the inguinal canal should be carefully made. As to the vesicles a slight tuberculous lesion is not always an indication.

In the cases of vesicular lesions with lesion of the testis and epididymis, everything should be removed, even where the lesions are medium. A bad general condition is a contra-indication.

New Procedure in the Diagnosis of Chronic Prostatitis.—DR. DORST.

Diagnosis and Treatment of Prostatic Abscess in Hypertrophy of the Prostate.—DR. MINET.—The diagnosis of these abscesses may be very difficult:

(1) In the latent form, which gives us functional signs and exposes the patient to very grave periprostatic phlegmon; (2) in those forms in which the disturbance is the same as those observed in prostatics without abscess; as complete acute retention or incontinence from overflow; the co-existence of a stricture of the urethra may complicate the examination; (3) when there is an intercurrent disease of other organs.

These difficulties render it necessary that the rectal examination should be made in all prostatic cases. Attention should be particularly directed to the prostate when fever is present, whether a suppurating epididymitis is present or not, or if an intermittent blenorrrhea or pyuria exists.

Rectal touch may at times give insufficient information; it may make us think an abscess exists when it does not; or a central abscess may be overlooked. If there is distention of the *bas-fond*, examination should be made if possible after evacuation.

Periprostatic lesions may mask intraprostatic or other periprostatic collections.

Often we may be unable to diagnose with certainty an abscess before its spontaneous opening followed by the presence of a point of depressibility on rectal examination.

It is important to note that rectal touch in the case of periprostatic trouble does not always permit of exact determination of the extent of the lesions, often much more extensive than would be believed. Evacuation by rectal incision should for this reason be rejected.

Origin of Certain Vesical Tumors.—DR. MORZ.—The extreme rarity of carcinoma of the bladder in women and its frequency in men, points to an extra-

vesical origin of these tumors. In making the histological examination of 38 vesical tumors in men, the author has established the fact that in 28 cases the tumor was prostatovesical. The results explain the recurrence observed so often in vesical tumors, and they indicate the necessity of making a good examination of the prostate before surgical intervention, and also point to the necessity of making an extirpation of the prostate where it is proposed to make total extirpation of the bladder.

Radical Cure of Hypertrophy of the Prostate.—DR. ALBARRAN.—The author is convinced that in hypertrophy of the prostate the loss of vesical contractility of the bladder is secondary to the glandular lesions. He believes moreover that even in inveterate cases, the secondary sclerosis of the bladder plays but slight rôle in the lessening of the power of urination; if the patients experience difficulty of urination or have complete retention, it is because the mechanical obstacle caused by the prostate opposes it, and in part also because the contractility of the bladder is inhibited. Guided by these ideas he has removed the prostate as completely as possible, without injuring the sphincter. A year and a half ago he operated upon two patients by imperfect methods; one carried a fistula four months; the other recovered and remains cured.

Before six months ago he had operated upon fourteen patients, and the observations are reported in a thesís of an interne, Dr. Petit; there was only one death; all the patients, when the treatment is finished, are cured; those still under treatment empty the bladder spontaneously.

Gravity of the Operation.—All his patients were infected; their mean age was 63 years (57 the youngest, 73 the oldest); three had pyelonephritis, several were in a bad general condition, many presented serious operative difficulties. Under these conditions he only had one death, and the post-operative conditions were always simple, except in one case whose perineal wound closed too soon, who presented the phenomena of infection.

Therapeutic Results.—Of the fourteen, one left the hospital before closure of the wound and he has been unable to obtain news of him.

Two recently operated upon still have a catheter; both are doing well.

Three, still under treatment in the hospital, empty their bladder completely, but still lose some urine by the perineum; these were recently operated upon.

Eight are cured; they empty the bladder completely and spontaneously; the urine has become clear, their general condition good, and since the operation have not used a catheter. The oldest case operated upon dates from April; he had had complete retention for eight months; he remains cured.

Of the eleven operated whose treatment is finished or practically so, four had had complete chronic retention, dating from eight months to five years; two had a complete retention recurring during the previous fifteen and seventeen days; five had chronic incomplete retention of 150 to 500 grammes, necessitating the use of the catheter several times a day.

The absence of mortality, the simplicity of the post-operative condition, the therapeutic results surpassed the author's hopes. He believes that perineal prostatectomy is indicated in all prostatics except when there are contra-indications due to diffuse local suppuration, to grave lesions, to bad general condition, or too advanced an age, when catheterization is well tolerated.

DR. PROUST.—At the present time prostatectomy is becoming more and more the customary procedure and will become more and more so. It is important to determine upon the precise details of this operation. Dr. Proust has formulated

the details upon two occasions. The first time two years ago (Gossert and Proust, *Annales Gén.-Urin.*), and recently in some recent work. At this time making a plea for prostatectomy for hypertrophy he has formulated the following procedure: Prerectal incision; separation of rectum and prostate. The posterior surface of the prostate is thus exposed, covered by the prostatoperineal aponeurosis. In order to bring the prostate into convenient reach, he has recourse to the following maneuver. He introduces through an incision made through the membranous urethra a sound with the end bent as a right angle; after introduction the instrument is turned 180°, so that the beak of the sound points toward the *bas-fond*; by drawing the instrument towards him the operator can bring the prostate well under control. Then enucleation of the prostate. It is then that hemisection of the prostate may be done, so important for the success of the operation; then we can proceed to the dissection of each of the lobes; after their enucleation and section the urethral wound remains to be sutured.

But if there are conditions well laid out for an operation, for example essential for the procedure as practised to-day by Dr. Albarran, the operation is done in a veritable pit. The latest researches of the author lead him to take a special position; an inverse perineal position or sacro-vertical, which permits the retraction of the posterior border of the incision even back to the coccyx. He hopes that this improvement of the position, considerable in his opinion not only for operation upon the prostate but for removal of the rectum, vesicovaginal fistula, etc., will be accepted and employed as were the details of Proust's first technique, such as hemisection of the prostate.

DR. LE FUR reported a case of prostatectomy by the perineal route in a patient 68 years old, affected for a long time with symptoms of hypertrophied prostate. At first incomplete retention, followed for the month before operation with complete retention, which a catheter *à demeure* could not modify. He described the method adopted in this particular case where the difficulty lay in the inequality of the lobes (the left lobe much larger than the right, and in its evolution toward the *bas-fond* and neck of the bladder formed such a mass that it was absolutely impossible to bring down the prostate into the wound, either by an instrument or by the finger inserted through the urethral wound into the bladder. The perineum being very thick created a new difficulty. Dr. le Fur decided to remove the large left lobe piece-meal; after removal the prostate was easily brought down to the level of the perineal wound. He advises this method under these conditions, leaving the extirpation of the smaller lobe for the last, as in this way the danger of wounding the urethra or bladder is avoided.

It is better not to make too large a wound in the urethra and not to incise the vesical neck, except where a median lobe exists (?), because a perineal urinary fistula may form more quickly. It is perhaps advantageous to replace the perineal drain by a catheter *à demeure* or a Pezzer catheter through the perineal wound, as in his case the drain caused painful contractions of the vesical neck and slight terminal hemorrhages. The drain was left in 5 days, then replaced by a catheter *à demeure* which was well borne. At the end of eight days the perineal wound was closed by two tiers; at a single moment the dressing took on a bad odor, probably from a small slough in the perineal wound, which quickly yielded to a lavage of silver nitrate solution (1-500). Up to the eighth day there had not been the slightest shock from the operation, the patient had gained, the urine became clear. After removal of the perineal drain the patient remained without a catheter *à demeure* for some time and was able to urinate partly

through the wound and partly through the pendulous urethra. The contractility of the bladder returned and the patient completely emptied the viscus.

DR. TÉDENAT had operated upon 4 cases of hypertrophy of the prostate in 1898 and published his results in 1899. He avowed his method of technique with some hesitation. Once he tried to crowd down the prostate into the perineum through a supra-pubic opening. Another time he had recourse to a large lithotrite introduced by the urethra into the bladder, and like Dr. Proust he was pleased with the way which the beak of this instrument controlled the prostate. As to the position given to the patient he did not go so far as to make him assume the sacro-vertical position as indicated by Dr. Proust, but he always elevated the pelvis as much as possible for this operation. Finally he avoided, wrongly without doubt, opening the urethra and sought to remove the hypertrophied tissue as well as possible. He repeated that he had no fixed technique. One of his patients died in three months. The other three remained cured; as for any residual urine, it was insignificant.

DR. POUSSON.—Can the operation so brilliantly applied by Dr. Albarran be applied to all cases of hypertrophied prostate? He did not think so. There was such a multitudinous variety of these cases, he thought, that outside of operations upon the external genitals we should preserve all the other methods. The Bottini operation, suprapubic prostatectomy are very much in favor with surgeons of other nations. And not to speak of suprapubic prostatectomy he asked Dr. Albarran whether he thought his procedure of perineal extirpation was applicable to cases where the median lobe took predominance in the hypertrophy, or in those cases, sufficiently frequent, in which the median lobe sprang up into the vesical cavity, in a manner analogous to the projection of the cervix uteri into the vagina. For his part he believed that these cases were best relieved by the suprapubic route, but these cases aside, he thought that the perineal prostatectomy as conceived by Dr. Albarran had a brilliant future.

DR. ALBARRAN spoke in reply. Dr. Proust had indicated two modifications which he had added to the technique of prostatectomy, which he has described two years before. He recommended the bent sound introduced by urethra into the bladder to depress the prostate, and the utility which the sacro-vertical position gave to the patient. As to the sound, Dr. Tédénat had said he also had already utilized this same idea. For his own part, at different times, he had used his own catheter *condé* for the same purpose. As to the sacro-vertical position, he believed it to be very advantageous and he agreed that the nearer the pelvis was brought to the vertical plane the easier it was for the extirpation of the

In a few words he would tell how he operated:

He makes a bi-ischiatic prerectal incision, simple without liberating cuts. This has always sufficed. He immediately hunts for the bulb of the membranous urethra. He thus reaches the prostate and then separates the rectum, which he draws back with a protecting retractor. M. Collin has constructed for him recently an apparatus which allows fixation, so to speak, of this retractor to the patient's pelvis, and by this automatic device he can do away with one assistant. Up to this moment he has not touched the levator ani muscles. He frees these with scissor cuts if they hinder him, but he could say that more often he could dispense with this procedure. He then cut into the capsule of the prostate with a bistoury as far as possible. For he believes it necessary to make a subcapsular enucleation of the prostate after the manner of Nicoll. The extra-capsular ex-

tirpations were far more dangerous. Upon this point he differed essentially from Dr. Proust.

It is then that he makes, as Dr. Proust advises, hemi-section of the prostate. This hemi-section takes in the inferior wall of the urethra behind the membranous sphincter and is carried up to the neighborhood of the bladder neck but does not involve it. Liberating, then, each lobe from the corresponding urethral lip, he extirpates the anterior suburethral portion of each lobe. Then he can, having done this, insert his index finger into the bladder, depress the *bas-fond* and extirpate the remaining portions of the prostate. The index finger thus inserted is a valuable guide as much for recognizing the thickness of the prostate remaining as for protecting the bladder wall. In this fashion, thanks to the previous separation of the capsule and to the easy exploration of the bladder with the finger, he can be sure of not having torn the prostatic cage and of not having caused destruction which could become grave.

Thanks to these precautions he has had only insignificant hemorrhage. This is so true that he has never been obliged to place ligatures, while he had never failed at this point to put on hemostatic forceps as often as he had attempted extra-capsular resection of the prostate.

In reply to Dr. Pousson, he would say that perineal prostatectomy did permit removal of the median lobe. He had always been able to extirpate it in his operations, whether by previous section of the vesical mucous membrane as was done in suprapubic prostatectomy, or by depressing that lobe with the index finger. He had had recourse once to the first of these manœuvres and he had been able, moreover, to suture the vesical mucous membrane.

After this extirpation of the prostate, he sutured then the prostatic urethra, first excising the borders of the wound. Because we must not forget that the prostatic urethra is dilated in these cases of prostatic hypertrophy, it has become too large and its calibre should be diminished. But this urethral suture is partial, he leaves an aperture at the lower angle through which he passes a drain into the bladder. This perineal drainage of the bladder in the first few days following the operation is of prime importance. It is necessary to maintain it. If the patient of Le Fur suffered from a drain so placed, it was because it was badly placed, probably not pushed far enough into the bladder. Dr. Petit, his interne, took special charge of this in all the patients operated upon, and in not one case did the patient suffer from the drain.

He knew of the operations done by Tédénat four years ago and had referred to them in his report. Dr. Tédénat had retained this impression that perineal prostatectomy was a grave operation. This impression was also shared by the majority of surgeons. It is still the actual impression. Now he thought it was no longer necessary to hold this opinion, after the series of cases which he had reported. Not only had perineal prostatectomy not given the mortality but the results obtained had surpassed his hopes. In suppressing the prostate, we gave back its functions to the bladder, which it had apparently lost, and the patients were benefited from every point of view.

He did not wish to enlarge here upon the mechanism of this cure. Without doubt the removal of the prostatic obstacle should be taken as the cause. But he thought that another reason existed, a phenomenon of inhibition exercised by the operation. Moreover, prostatectomy does not have the monopoly of this inhibiting influence. The first prostatic upon whom he had operated, had formerly been in a state of complete retention and nevertheless he emptied his bladder

spontaneously the same day as the operation. He had seen in some of his cases the bladder previously apparently atonic recover its contractility very quickly.

He closed by saying whatever the mode of action of prostatectomy, it is the operation of choice in all cases of hypertrophy of the prostate and that it is the perineal route to which we should have recourse to extirpate the prostate and to gain the best conditions of technique and security.

The Bottini Operation in Prostatitis.—DR. CARLIER.—Before all the operations practised upon the testicles and cords to modify the situation in prostatics, and trusting in the results obtained by some surgeons by means of the galvano-cautery applied to the prostate, Dr. Carlier had operated upon eight cases by the Bottini method. According to the conformation of the hypertrophied prostate he had made one, two or three cuts, with the cutting blade heated to a point between red and white heat. Almost always the section was made behind in the median line, three times in the median line, together with bilateral cuts, but in no case, Dr. Carlier insists on this, was an anterior cut made into the vesical neck. The posterior urethra was always carefully disinfected, as well as the bladder, and this organ was immediately distended with air.

Only one patient received chloroform, five were anesthetized with bromide of ethyl, the last two had local anesthesia with cocaine. The latter method sufficed.

Of these eight cases, two were badly infected with renal complications, four slightly so, two cases only were aseptic. One of these cases was subjected twice to the operation, at a month's interval. The age varied from 57 to 68 years; contrary to the advice given by Bottini, Dr. Carlier always left in a catheter *à demeure* for four or five days following the operation. These nine operations passed without accident and without consecutive febrile reaction. In three patients there occurred a hemorrhage, otherwise without gravity.

Considered altogether the results obtained are more than mediocre. Two patients were operated upon too recently to take into account. Of the six others, one only has been benefited by the operation. This was a man 57 years old, who for two years had absolute retention. A first median section gave no relief, a second section made a month later comprised three cuts and he improved to the point that two months after the operation this patient used the catheter no longer, but the bladder held a residue of 100 grammes.

Four others of these patients urinated more easily than before the operation, but their residual urine being less than before is sufficiently important. One patient had nocturnal incontinence for weeks, but this stopped later.

For the rest he could say that there had been no deplorable accident and that the operation is easy to perform. He does not believe in the future of the Bottini, which he regards as an operation hardly surgical. In the fortunate cases it only momentarily relieves the obstacle to the passing of the urine, it does not hinder the ultimate development of the hypertrophy.

DR. DESNOS.—From the discussion one gets the idea of the necessity for an operation for hypertrophy; but in his opinion the procedure should vary with the form of the hypertrophy and he believes that he can formulate those which will be benefited by the galvano-cautery. The two primordial conditions of partial prostatectomy are found here, that is to say, those where the obstacle projects into the bladder near the neck, whatever the volume of the prostate, on the one hand, and on the other the conservation of the more or less total of the contractility of the bladder. In his twelve cases operated upon his results were excellent in six, incomplete in the others. The difficulties of catheterization constitute an indication of the first order, and in all the passage of the catheter is

rendered easier. The condition of retention was improved in all his cases, and six completely emptied their bladders, after a variable time. In the others the amount of retention was lessened.

Among the contraindications the first is infection; we should not operate upon the infected patient except with the greatest circumspection and never during an acute attack; cystitis have been observed and prostatitis have presented a certain gravity; he has even had a small abscess of the prostate. There was no death. This of which we should be forewarned is the tardiness with which the results are produced, apart from the greater ease of using the catheter which is usually immediately; as to the inflammatory complications they present an analogous progression and diminish slowly.

He has modified the galvano-cautery of Freudenberg in doing away with the endless screw which permits the development of useless force and even harmful, because it permits the blade to jump the prostate without incising it. He has replaced this with a rack with large teeth moved by means of wheel and pinion which transmits to the hand the slightest sensation of resistance.

Pseudo-Membranous Cystitis, Supra-public Operation.—DR. ESCUT describes the case of a patient affected with this singular affection described by Guyon and Girard in 1887. The study of it has been again undertaken since by Grousset, pupil of Rochet. (These de Lyon, 1898.) The patient was sent to the author in June, 1900, suffering from vesical trouble for the previous fifteen months and coming on after eight days of absolute constipation. There were no genito-urinary antecedents; nor did the genital apparatus show any lesion. Urination was not increased in frequency, the bladder was always well emptied and its capacity normal. The urine was very cloudy, with a repulsive fetid odor, it was ammoniacal and deposited on standing an immense amount of whitish débris, the largest masses 4-5 millimeters. The débris was incrustated with calcareous deposit, some of the débris not incrustated floated like pellicles of wax. The author thought the débris was due to decomposing papillomatous growths, the microscopic examination only revealed dense strata of pavement cells. There was no trace of villositities. The urine was not purulent, the cloudiness was due to the epitheliorrhœa and a microbic flora of various organisms. Cystoscopic examination showed a bladder surface covered with whitish floating masses but little raised.

Urotropin and irrigations with boric acid solutions gave considerable relief as the putrefaction and phosphatic precipitate and ammoniacal condition ceased, but reappeared when treatment was omitted. After a year of palliative treatment a suprapubic cystotomy was done. The bladder was very large, of the infantile type ascending high above the symphysis. On incising the bladder, the entire mucous membrane covering the bladder was of a silvery whiteness, 3 millimetres in thickness. An energetic rubbing removed this, leaving a mucosa with a large venous plexus and ecchymotic plaques. The epithelium was friable, the vesical wall thick, the submucosa very supple; no ulceration and no induration. After this rubbing off of the epithelial rind and curretting, the entire surface was subjected to the thermo-cautery. Prolonged drainage. After its removal there was a rebellious fistula for four months. It has for the past month closed solidly, the catheter was removed only ten days before. The urine, clear while the catheter remained in place, became slightly cloudy and began to have an odor, and carries a fine débris. The result is doubtful.

Precocious Gonorrhœal Infection of the Bladder.—DR. GUILLON described the case of a patient who for three days had considerable terminal hematuria

(40 grammes) at the end of each urination, absolutely without pain or frequency. With the hematuria appeared a slight discharge. The patient was not greatly disturbed with his condition because there was no pain. Microscopic examination showed numerous colonies of gonococci, intra- and extra-cellular.

The hematuria quickly yielded to intravesical instillation of protargol and the urethritis yielded to anterior treatment.

Dr. LE FUR thought the case resembled rather a case of simple ulceration of the bladder due to gonococcic invasion; the absence of frequency and pain, the profuse hematuria seemed to confirm this.

The presence of gonococcus in the urine did not contradict this diagnosis. He recalled the researches he himself had made (1901) upon this subject. These ulcerations are in other respects similar to ulceration of the stomach, intestine and of the mucous membrane of the biliary passages; now it is admitted at the present time that all simple ulcers are of infectious origin due to different micro-organisms; *simple* ulceration here means that it does not arise from any known pathological process (tuberculosis, neoplasm, chronic cystitis, foreign body, calculus, etc.).

Dr. Pousson thought that at the present moment when we were studying on all sides the procedures for the best method of the management of prostatic hypertrophy to remedy the dysuria in old men, it might be interesting to draw attention to another variety of obstacle which at all ages though exceptionally was a hindrance to urination. This was the existence of a valve developed at the vesical neck. Without according to this vicious condition either the frequency or importance which Mercier attributed to it, its actual existence could not be denied. He had observed two cases in the past year. The first was a young man of 25, who for a long time had presented phenomena of painful urination which had given rise to the suspicion of an epiprostatic calculus, the more so as it was noted that in front of the neck there was given a sensation of gravel to instruments which were stopped at that point. The bladder was opened and the valve found and resected, and the patient cured. The second was a man 56 who had been treated for several years for urinary difficulty thought to be due to prostatic trouble. After examination Pousson was convinced that the trouble was due to a very fine valve springing from the prostate at the vesical neck. This was found and resected after opening the bladder. The patient recovered full power of urination.

Dr. LOUMEAU had operated some years ago upon an old prostatic with large calculus. The suprapubic opening revealed a fan-shaped valve on the inferior surface at the neck, thin and soft and not resembling in any way hypertrophy of the median lobe. Fearing to complicate the operation, Dr. Loumeau did not interfere with this valve and the patient recovered normally. Eight years after this a new suprapubic cut was made for another large calculus, and although at this time he sought for the valve, no traces of it were found.

Dr. CARLIER has seen three cases of valve at the bladder neck.

Report of a Case of Papilloma of the Bladder Operated Upon through the Cystoscope by Dr. Nitze.—Dr. JANET, in the month of May, 1901, was consulted by a woman 65 years old for hemorrhages into the bladder, which she had had repeatedly for twelve months. Examination revealed the presence of a vesical papilloma the size of a nut, situated at the posterior border of the trigone. It was composed of two portions, a rounded projection pedunculated with a vermiform excrescence floating in the bladder fluid. The rest of the bladder was healthy. The author gave his reason for preferring in this case operation through

the cystoscope and called Dr. Nitze to Paris. The tumor was removed in two or three séances.

The sequel to the operation was simple, only slight hemorrhage, the patient was not confined to the bed and could walk out each day.

He had a few days before examined her through the cystoscope and the only trace of the operation was a yellow linear cicatrix scarcely visible.

Total Leucoplasmia of the Bladder.—DR. RAVASINI reported a case.

Note upon Continuous Irrigation of the Bladder after Supra-pubic Cystotomy by Means of Continuous Installation.—DR. ESCUT described a new method of continuous instillation of an aseptic fluid drop by drop through the bladder in place of continuous irrigation, without distending the bladder, and regards it as a successful means of procedure in such cases.

Vesico-Rectal Fistula in Man Due to Calculus.—DR. CARLIER had occasion to operate for a large vesical calculus in a patient of 34 who since he was 7 years old had carried a recto-vesical fistula. The fistula had been caused by the expulsion of a small calculus from the bladder into the rectum. The fistula had never closed and the patient lost three-fourths of his urine by the rectum. It is interesting to note that the bladder and kidneys had borne this communication with the rectum perfectly for so long a time. The opening was large enough to admit the tip of the index finger and the patient frequently passed small masses of feces through the urethra. The urine was cloudy and contained the coli bacillus, but in moderate quantity.

Contribution to the Physiology and Pathology of Incision and Extirpation of the Kidney.—DR. POUSSON.—We know from the experiments and clinics of Professors Guyon and Albarran that the state of tension of the kidney modifies the secretion in quality and quantity, and that incision of the renal parenchyma causes cessation of the tension, and restores the urinary tension.

These same authors have shown, on the other hand, all that we have a right to expect from nephrotomy in surgical affections of the kidney which raise the internal tension: Anuria, néonephrosis and pyonephrosis. Thinking that by reason of the vascular alterations predominating in chronic nephritis the circulatory apparatus is profoundly modified and exposes the parenchyma to incessant variation of tension, Dr. Pousson was led to attribute the disturbances of urinary secretion in cases of Brights to an excess of tension and to combat them by nephrostomy.

He has done the operation in cases of parenchymatous nephritis, interstitial and mixed. At the time of intervention he has been able to verify the reality of intrarenal hypertension, for the kidney has always appeared tense, tumefied, of a red brown coloration, also after section of the capsule the parenchyma bulges out and the kidney wound bleeds profusely.

In all his cases the author only operated upon a single kidney, guided in his choice by certain vague indications causing him to suspect a unilateral nephritis or that one was the predominating side, such as spontaneous or provoked pain in one of the lumbar regions, edema plainly unilateral or more marked upon one side. In two of his cases he had presumption of nephritis localized in a single kidney; in the other three the inflammation affected both kidneys. One of these latter died within forty-eight hours, but the other two recovered and in spite of the bilateral lesions, the quantity and quality of their urine, showing marked changes before intervention, returned to normal. This surprising result he thinks explained by the reflex influence of lesions in one kidney upon its congener.

NEW YORK DERMATOLOGICAL SOCIETY.

303D REGULAR MEETING, FEBRUARY 25, 1902.

JAMES M. WINFIELD, M.D., *President*.**A Case of a Peculiar Disease of the Scalp.**—Presented by DR. H. G. KLOTZ.

The patient, Eva Th., 8 years of age, born in Russia of Hebrew parents, was brought to the German Dispensary on Jan. 28, by her mother, who could give but little information in regard to the development of the conditions on the scalp. She reported that she had noticed about 3 or 4 weeks ago that the child's hair was rapidly disappearing and that the girl complained of moderate pains when lying down on her head. The child had always enjoyed fair health and although somewhat anemic was well nourished and free from other complaints. On operation it was found that the dark blond hair, which apparently had been present in the quantity and quality usual for children of her age, had disappeared from the larger part of the scalp, leaving large bald areas of irregular shape and size, mostly confluent. The skin itself showed a smooth, lead surface without any distinct change in the epidermis, as scales, crusts, vesicles, pustules, etc., but irregularly distributed over the entire scalp there were seen numerous circumscribed but not sharply defined spots of a dark bluish red color, separated by normal portions of skin. To the touch these spots were distinguished by considerable softness which suggested the presence of some fluid underneath the thinned skin. On some places the softened portion seemed to communicate with each other under the healthy portions of the skin, as a pressure on the one would produce a distinct bulging out of a neighboring area. Much to my surprise on puncturing the softened places in different localities and on different occasions no pus was ever found but invariably some dark blood would flow out and continue to ooze for some time. Unfortunately I had no opportunity for making a microscopical or bacteriological examination of this blood.

The conditions somewhat resembled certain forms of subcutaneous gummata I have occasionally observed, but neither the history nor the further development of the disease furnished any substantial reason for the diagnosis of syphilis. The treatment principally consisted of moist applications with a 1-3000 solution of the bichloride of mercury and inunctions of the scalp with the ointment of the white precipitate of mercury. During the last two weeks the syrup of iodide of iron was given internally in moderate doses. Now the condition is already greatly improved, but few of the soft dark-red spots can be found, while others more whitish, slightly depressed, quasi-cicatricial are found.

DR. A. R. ROBINSON thought the case was dependent upon staphylococcic infection, even though no localized suppurative lesions have been seen. He had shown a very similar case to the society a short time ago, and suppurative lesions developed later.

DR. L. DUNCAN BULKLEY agreed with the diagnosis made by Dr. Robinson. He had seen two or three similar cases lately, with superficial abscesses, often with very little pus, and patches of baldness.

DR. E. B. BRONSON said that the case must be some form of infection, but it seemed strange that there should not be more pustulation.

DR. J. A. FORDYCE thought the case was well worthy of considerable study and investigation from a bacteriological standpoint. The ringworm fungus should certainly be excluded by microscopical examination.

DR. S. LUSTGARTEN thought the case was a local, subacute infectious condition of the skin. It was not necessary to have pus formation. The process seemed rather too acute for ringworm or for infection of the hair follicles, nor was the appearance of the hair such as to suggest such an infection.

DR. H. H. WHITEHOUSE said he was inclined to agree with Dr. Robinson's conception of the case. The acuteness of the process and the amount of damage done, even though there was no pus formation, seemed to support that view.

DR. GEORGE THOMAS JACKSON took the same view as Dr. Whitehouse.

DR. KLOTZ said that in the main he agreed with Dr. Robinson in the opinion that the conditions were due to the infection with some coccus. The fact that the treatment which he had employed was principally a disinfecting one pointed to such a conclusion. It was remarkable, however, that no formation of pus had taken place in the subcutaneous tissue and no breaking down of the skin. He could not discover the slightest evidence of a folliculitis in the case, the surface of the skin at all times remaining smooth, free from scales, crusts, etc.

DR. BULKLEY asked for the experience of others regarding the regrowth of the hair in such cases.

DR. KLOTZ replied that he could not find any swelling of the roots of the hair or other evidence of inflammation upon the root sheath; the hair simply seemed to drop out, as he believed, owing to the temporary interruption of the regular supply of blood. He would expect in time a new growth of hair, although some small areas might remain bald for some time, but would gradually become overgrown again with hair.

Atrophoderma Neuriticum.—Presented by DR. A. R. ROBINSON.

Patient, a young man, fell and injured scalp near median line area anterior fontanelle one year ago. Eight months later hair fell out in areas about $2\frac{1}{2}$ inches in length and $1\frac{1}{2}$ in breadth at widest part. The bare area was egg-shaped and extended to near edge of hair limit on forehead. This area was depressed and atrophied. There was scar tissue, although ulceration had not taken place. An area of atrophy about $\frac{1}{2}$ inch in diameter extended to near the root of nose and slightly to right of median line. There was also a slight fan-shaped area of atrophic skin to the right of this with small part next the hair. There were no subjective symptoms. The case will be published and illustrated.

DR. FORDYCE thought the definition given by Dr. Robinson covered the ground. It was probably a neuritis followed by skin atrophy.

DR. E. B. BRONSON said that he was pleased that Dr. Robinson had not called the case morphea. A number of similar cases had been presented at the London Congress, and had been labeled morphea. Dr. Bronson referred to a case which he had presented to the society, that of a man who had once had syphilis. After a time two ulcers had formed on the top of the head, and had been exceedingly difficult to heal. In connection with the ulcers, and in the same line, was a line of atrophy having the identical position of that shown in Dr. Robinson's case just presented. The ulcer was simply indolent when he saw it, and presented

no characteristics of syphilis. It had probably resulted primarily from inflammation of a nerve.

DR. E. L. KEYES thought it was very clear that the cause was traumatic and that the patient was neurotic. Close questioning showed that the injury had not been very severe, and it was probable that his neurotic condition had as much as the injury to do with the lesion presented.

A Case for Diagnosis.—Presented by DR. J. A. FORDYCE.

The patient, sixty-seven years old, had suffered from senile tremor for an indefinite time.

He had noticed an itching eruption on his body for the past year.

Examination showed a circinate and gyrate eruption over the back particularly the gluteal regions, the lower part of the abdomen, the thighs and upper extremities. The eruption was very superficial, the margins being made up of flat angular papules, while the enclosed centers of the marginate patches was slightly pigmented and atrophic. The color of the papules was a dull red, somewhat darker on the lower extremities. There was little scaling present.

The eruption was an unusual one and presented certain features of an annular lichen planus.

DR. KLOTZ stated that as far as it was possible to make a diagnosis in such a case without longer observation, he would make that of dermatitis herpetiformis. The presence of the numerous patches of papular elevations on some spots slightly resembling urticaria, the considerable itching, the appearance of new patches at intervals, and the disappearance of others, the extension of the trouble over several years apparently furnished all the important features required for dermatitis herpetiformis. The fact that only papular, no multiform, lesions were present would not invalidate the diagnosis, as in other instances only vesicles or bullæ had occurred.

DR. G. T. JACKSON could not agree with the diagnosis of dermatitis herpetiformis, for he had never seen a case of that disease presenting such an appearance. Nor did it resemble lichen planus or a papular syphilide. He called attention to the decided tendency to the formation of rings with raised edges and peculiar blue-red color, and added that he was inclined to look upon the case as one of persistent exudative erythema.

DR. ROBINSON said that he had seen this man at one time, and recalled the fact that he had made a diagnosis of dermatitis herpetiformis. From its present appearance he would still expect it eventually to develop into a more classical case of dermatitis herpetiformis. He had the photographs of a case showing well the ring forms alluded to. The ring formation, the multiformity of the lesion and the itching seemed to him to confirm this diagnosis. He did not see the remotest resemblance between the photographs presented by Dr. Fox and this case.

DR. BULKLEY said he did not see how one could escape from the diagnosis of dermatitis herpetiformis. Duhring had described many such cases in which there were no vesicular lesions; their presence or absence depended entirely upon the severity of the process. He saw no reason for thinking the case one of lichen planus, for he had never seen that disease with so many urticarial lesions; moreover, with this amount of eruption there should be some of the primary single lesions, which was not the case here.

DR. BRONSON said it seemed to him more like dermatitis herpetiformis than any other disease. It was distinctly an angioneurosis. The disease under dis-

cussion seemed to him totally different from the photographs presented by Dr. Fox. The periphery of a certain area showed the eruption and the center was clear, whereas in the photographs the whole surface was roughened, there being apparently a keratosis present. In its nature it appeared to be an erythema. The papules were soft and unlike those of lichen planus, and there was evidently very little multiplication of the epidermis. Duhring had described a great variety of lesions, some of them erythematous, under the name of dermatitis herpetiformis. It was perfectly possible for the subjective symptoms to vary with the nature of the lesion. As a rule, an erythema does not itch much, while a vesicular disease does itch a good deal. Most of the cases of dermatitis herpetiformis were vesicular, and hence we were accustomed to consider severe itching a necessary part of dermatitis herpetiformis. The case seemed to him to answer in all its characteristics to the definition given by Duhring of dermatitis herpetiformis.

DR. S. SHERWELL said that the clinical picture did not seem to him at all like Duhring's description of dermatitis herpetiformis. The case presented a cribriform appearance, and he had never seen this so distinctly in dermatitis herpetiformis. He did not think it was lichen planus, but he did not feel at all sure regarding the diagnosis, though the case suggested to him a persistent multiform erythema.

DR. WHITEHOUSE said that he thought he had seen evidence on the back of lesions of lichen planus, and it was possible at least that the case was one of lichen planus annularis.

DR. FORDYCE said he would exclude the disease shown by Dr. Fox, pityriasis rosea, which presents a scaly condition of the skin, not present in the case under discussion. In the latter there was a distinctly papular condition. Again, he had seen a fair number of cases of dermatitis herpetiformis, but not one of them resembled the disease in question. Here there was one type of lesion throughout, while dermatitis herpetiformis is a multiform eruption. He did not think there were any urticarial lesions in this case. The lesions begin as an infiltration of the derma, the centre of which clears up, the disease spreading marginally. The disease seemed to him to conform more closely to annular lichen than to any other disease. He had presented a somewhat similar case some years ago. In the center of the patches there was sometimes a recurrence of the papules, and that was what was taking place in the present case.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

Wednesday Evening, February 19, 1902.

JOHN VANDERPOEL, M.D., Chairman.

Prostatectomy Forceps.—DR. GUITÉRAS.

The instrument which I present to you resembles very much a pair of sponge forceps, excepting that on the handle there is a long arm with a number of notches on it, as is seen on tongue forceps, which makes it possible to grasp any sized gland with it without injuring it. The blades are oval and fenestrated in the center, and are serrated on the inner surface. The shafts running from the

blades to the pivot are thin and somewhat separated when closed. The two illustrations which I present demonstrate the manner of using the instrument.

In plate No. 1 the forefinger of the left hand will be seen in the rectum, while a pair of sharp pointed curved scissors held in the right hand will be seen passing through the perineal urethrotomy opening, and in the act of cutting the floor of the prostatic urethra at the apex of the prostate.

Plate No. 2 shows the forefinger of the left hand inserted into this cut, sweeping it around between the lobe of the gland and the capsule, while the former is being held and gently drawn down by the forceps held in the right hand.

I should also like to call the attention of the gentlemen present to the prostate and bladder in these illustrations, the drawing was made from a frozen cadaver of a man who had been castrated some two years before for enlarged prostate. When a vertical section was made in the antero-posterior diameter in the median line through the bladder and prostate, with the former viscus empty, it was noted that the walls of the bladder, perhaps somewhat thickened, had collapsed, the cavity being about the size of a French pea. When this was thawed out by applications of hot water it assumed different shapes during expansion, the one that you see here is probably made when the cavity was sufficiently large to hold one or two ounces. I made several drawings of the bladder in different stages of dilatation which I shall be glad to present on some other occasion before the Society, as there is no text-book that I have ever seen which contains such drawings.

DISCUSSION ON DR. GUITÉRAS'S FORCEPS.

DR. GREENE.—I want to thank Dr. Guitéras for not only showing the instrument but for bringing these plates, which are very clear and help one a good deal in understanding this particular method of operation.

DR. BROWN.—I want to ask a question, not with reference to this immediate operation, but with reference to one point in perineal prostatectomy, as to how frequently it occurs after shelling out the prostate and relying upon the perineal incision alone when the tube is removed, whether it occasionally happens that the point of the perineal tube gets caught in the capsule and in the cavity of the enucleated gland, and whether it is somewhat difficult to have it enter the bladder when taken out for cleansing.

DR. VANDERPOEL.—The plates are certainly very instructive, and it is an excellent method of showing the steps in an operation to draw them or have them sketched. Perhaps a photograph would be more definite, but this certainly gives one an excellent idea of the various steps.

DR. GUITÉRAS.—Prostatectomy by this method is indicated only in cases where the gland is large and low seated as determined by rectal examination, and is not recommended where there is a large growth extending up into the prostatic urethra and neck of the bladder.

When the lateral lobes are removed by this method through the incision made in the floor of the prostatic urethra, I catch the cut edges of the prostatic urethra on either side with artery forceps, and pass a gorget into the bladder between them, a perineal tube is then slipped in along this instrument. The perineal drainage tube that is used is a stiff-walled soft rubber catheter from 38 to 42 French. I allow this to remain in for eight or ten days, then I remove it and insert a smaller one, which I leave in for another week, after which I pass a catheter through the anterior urethra into the bladder and allow it to remain

there until the perineal tissues have closed around it, during this time I give the patient urothropin and a large amount of water and dress the wound twice daily, washing out the bladder through the retained tube or catheter each time with boric acid solution and once a day with 1-4000 nitrate of silver solution.

Radiographs of Vesical Calculus with Specimen.—DR. VANDERPOEL.—I have two radiographs here of different stones or of parts of same. In these cases the stones are of different forms. The first one you see here is this calculus, this specimen I have here, the nucleus of which seemed to be of carbonate of lime and the rest of the stone of amorphous or earthy phosphates. The stones was very easily removed. It was seen first by cystoscope easily, and easily removed afterwards by suprapubic cystotomy. The specimen I have here has been opened and you can see the calcium carbonate nucleus. The calcium carbonate, as I understand, is rather rare; in fact, it is quite rare to get one with as large a nucleus as this one shows here. The other one is pushed over and I have not operated as yet, but the stone has been diagnosed as oxalate of lime stone. I have seen it with the cystoscope; very easily felt. The exposure in each is about ten minutes. This one at the upper part is under exposed. This one, as you see, is somewhat darker than the other; it is about the same size, a little broader, and as seen through the cystoscope is a very dark green or almost black in appearance. It was impossible to get a picture of the entire stone at once. I could only see one corner or one edge at one time. As I say, the patient has not yet been operated upon. These radiographs were made by Mr. Caldwell in the laboratory of the University in Bellevue Hospital Medical Clinic. The photograph here is a photograph of the stone which you see. It has really no special value excepting as a matter of record. It is, however, a very good photograph and gives a very good idea of the stone as it was.

DR. GUITÉRAS.—What position was the patient in when these photographs were taken?

DR. VANDERPOEL.—The patient lay upon his abdomen, and the picture was taken at an oblique angle of 45 degrees.

DR. GUITÉRAS.—That is a very interesting point because these stones show much more plainly than if the patient were standing up.

DR. F. TILDEN BROWN.—I am interested to see, as shown in these pictures, that phosphatic stone casts much less of a shadow than the oxalate of lime. I think that is contrary to the usual expectation, is it not?

DR. VANDERPOEL.—The diagnosis of the stone was simply made through the cystoscope; it was a mulberry stone and had all the appearance of an oxalate of limestone, the color and appearance and feeling to the searcher. The print shows the stones removed from the bladder, where there was a large middle lobe and two large lateral lobes. It was a case of considerable interest to me because in consultation my consultant thought this large median lobe was a right lateral lobe. I had the opportunity of asking him to insert his finger in the bladder at the time the stone was removed and at the time of suprapubic prostatectomy, and he was satisfied, as was I—I wasn't positive it was a median lobe and the reason he thought quite positively it was a lateral lobe was because in looking upwards there was a dense margin leading off to the right hand side and high up. It looked to me as though it were a median lobe. He was positive in his assertion that it was a right lateral lobe.—thought possibly it was a right lateral lobe which had grown out there in a pedunculated fashion and into the median area of the anterior bladder. It proved to be a

median lobe with a fold of mucous membrane, a veil, as it were, reaching up pretty nearly to the upper margin of the left lateral lobe. There was some doubt also as to the operation which was performed in this case. I took the position that what ought to be done was a suprapubic cystotomy for the removal of the stone and at the same time utilizing the incision for the enucleation of the lobes. My consultant thought very strongly that a crushing operation with a combined Bottini was in question, although he admitted that it was radical and that it might have to be repeated, either the crushing of the stones or the Bottini operation. He thought it was a little safer for the patient, a little less risk, and I thought that the additional risk, whatever it might be, was justified in view of the greater chance of radical result. These stones could only be seen—the middle lobe reached over these stones so much that only the margin of 3, possibly 4, could be seen—although I thought there was probably a good deal of a pocket—I was hardly prepared to remove 4 or 5 stones. The age of the patient was 60 years.

The Nature of Prostatic Hypertrophy.—By ROBERT H. GREENE, M.D., and HARLOW BROOKS, M.D.—The paper published in full in the *Journal of the American Medical Association*, April 26, 1902, the writers' review of the literature on the subject during the last five years and consider especially the work done by Chikanowski, Albarran and Halle, and Motz. They state that for the past twenty years Prostatic Hypertrophy, although the various investigators have differed as to its type, has been considered as due to a tumor of some sort, either adenoma, a myoma or a fibroma. They mention Chikanowski's work as tending to show that these growths are an inflammatory product, and the senior writer's confirmation of his views, as stated in a paper read last June before the American Medical Association entitled "Fallacies in the Treatment of Urethral Diseases." They differ with the views of Albarran & Halle as to the true nature of what is termed by them adenoma carcinoma, but give them credit for having called the attention of the profession to the fact that cancer of the prostate is more common than has generally been supposed. They then give a detailed history of the appearance of the sections made through fifty-eight hypertrophied prostates as the result of an examination of prostates running into the hundreds in number. Of the fifty-eight hypertrophied prostates examined by them, they either had or were able to obtain the clinical history of nineteen. Quite a number of these prostates had been removed at operation. These further studies of theirs tended still further to confirm the views of Chikanowski that an enlarged prostate was due to an inflammatory lesion and that the enlargement depended according to what part of the prostate the lesion was situated in. If outside the acini in connective tissue form, a small hard prostate would result. If over the mouths of the acini, the acini would be dilated and a pseudo adenoma but not a true adenoma would result, and what had been considered a muscular overgrowth was due to an infiltration of the muscular tissue by connective tissue and was not a true muscular increase. Often a single gland showed several types. The most common lesion was interstitial hyperplasia.

The next in importance, present in 36 out of the 58 cases, was inflammatory infiltration. No cases of true glandular or muscular hypertrophy were found. Three fibromas and three cancers were found in the 58 cases examined, but these were apparently secondary to the preceding inflammation. The inflammation in these cases was apparently consecutive to an original posterior urethritis. Stereopticon views of sections made through 13 prostates were shown, showing

the gradual progression from a chronic prostatitis to a cancer of the prostate. The writer's conclusions were as follows:

CONCLUSIONS.

- (1) Prostatic hypertrophy of the aged is the result of chronic prostatitis.
- (2) It most frequently arises from chronic posterior urethritis of whatever cause.
- (3) True neoplasms of the prostate are rare and are not concerned in the production of prostatic hypertrophy.
- (4) Carcinoma is apt to occur in the hypertrophied prostate as a result of the chronic inflammatory process.

DISCUSSION.

DR. BROWN.—I have very little to say on this subject, certainly nothing to add to that which has been so beautifully set forth by the reader of the paper and by the expounder of the plates. I express my pleasure at having heard this most instructive dissertation on a most interesting subject. I have learned more from what I have heard to-night than from any similar presentation I know of. I haven't followed the matter up from this same standpoint and do not feel prepared to make any comments upon the probability of the grounds taken by Dr. Greene in his paper. I am particularly interested in Dr. Brooks' demonstration and wish to thank him for the expression of his views concerning the origin of corpora amylacea in the prostate. I think that although recognized they have been passed over as a concomitant of the prostatic trouble and very little said about them. I have often been annoyed in looking up works on histology to find their presence alluded to but they had not attempted to explain their form. It seemed to me that that one plate carried a great deal of evidence in its morphology in support of the statement here affirmed that they are formed by the compression of cast-off epithelial cells.

DR. MORTON.—I can only express my thanks to Dr. Greene and Dr. Brooks for the valuable work which has been set forth here this evening. I think that those who realize that the text-books in speaking of the hypertrophied prostate give us little or nothing on the subject will appreciate that a great deal of light has been thrown, it seems to me, on the histology of the enlarged prostate, and light which we have never suspected before.

DR. LAPOWSKI.—I have learned this evening more than at any other meeting. Before beginning my remarks I would like to direct the attention of the reader of the paper to the fact that Chikanowski's paper was published in 1898 in Polish, then translated and published in German in 1900. When I directed the attention of our Society to the conclusions of Chikanowski's paper in 1898 a member of our Society objected to his conclusions as not being substantiated or proved by any other investigator, and I am glad to hear this evening Dr. Greene and Brooks came to the same conclusions in their investigations as Chikanowski. From the picture shown by Dr. Brooks and from his explanations a clinician can learn a good many things. He will have to modify not only his treatment of prostatic hypertrophy but the prognosis of the disease, especially in the chronic cases of prostatic hypertrophy. Dr. Brooks showed us that new connective tissue is developing around the duct of the glands, compressing it, and in this way preventing the contents of the glands from evacua-

tion. In such conditions very little can be expected from massaging and compressing of the gland through the rectum with the view of expressing the contents of the glands. Even full absorption cannot be expected, as Dr. Brooks showed to us that the blood vessels in the connective tissue are very little developed.

Another clinical point is made clear to us by these investigations—the hard and soft prostate. When the connective tissue is developed around the acini of the glands and not at the mouth of the glands, then we will have a hard prostate. When on the other side the developed connective tissue presses the mouth of the duct, then the acini of the glands transforming themselves in cyst-like formation will give us the sensation of a soft prostate. All as we see depends upon the place of the new formation of connective tissue.

The next important point in Dr. Greene's presentation is the fact mentioned first by Albarran that some hypertrophied prostates in their latter stages develop clear characteristics of a cancerous growth; that there are patients who at a given period of time will only present a plain hypertrophy of the prostate and the same patients 10 years later develop an epitheliomatous prostate. The reason of that change is not clear to us, but judging from analogy I believe that such cases are due to irritation to which the prostate was exposed. We can see such analogies in glands of the skin where a plain wart or nevus gradually changes into a malignant growth. We see some benign epitheliomata will change into malignant forms. We see leucoplasia upon the tongue changed into malignant growth, and in all such cases we avoid irritation, knowing that we might give an impulse to malignancy of the growth. Dealing, then, with a hypertrophied prostate we must have the same fact in our mind and not to add to the irritation produced by the presence of the chronic gonorrhea, which is the primary cause of hypertrophied prostate, other instrumental irritations in trying to influence a process which according to Dr. Brook's microscopical pictures cannot be influenced by any manual or instrumental irritation.

In trying to find the cause of hypertrophy of the prostate many clinicians do not dare to trace it to the attacks of gonorrhea, while all other points, clinical as well as microscopical, warrant such conclusion; and here I would suggest one point to the writers who report cases of prostatic hypertrophy, to note in every case not only the general condition of the patient, but to investigate positively how many attacks of gonorrhea the patient was exposed to and what kind of treatment he received during the attacks.

In the end, let me thank, Mr. Chairman, the readers of the paper for their scientific contribution to our Section.

DR. BIERHOFF.—It is seldom one gets an opportunity to thank the reader of a paper at our medical societies without criticism, and I think we are to be congratulated this evening upon having listened to this one, which we can praise in every respect and criticize in none. I am especially thankful to the reader of the paper and to Dr. Brooks who demonstrated, for the additional interest this paper has given me from the fact that it supports me in a view I have held for some time, that is, that the inflammatory conditions of the prostate in the sub-acute stage were too little recognized, whether due to gonorrhea or to other inflammatory conditions, or to chronic congestions. The main point in the paper is, as I understand it, that prostatic hypertrophy is due to the results of inflammatory conditions affecting the posterior urethra, or the prostate. I have been pleased to see that the authors have not been led into the error of saying posterior urethritis of gonorrheal character, because I believe these

chronic gonorrheal processes are only a part of the congestive and inflammatory conditions which lead to hypertrophy. The additional value is that they have given us in so clear a manner the character of the process itself. I believe they make the indications very much clearer than has been heretofore the case. I think that when we have listened to a paper of this sort we see that it is possible for us by judicious treatment directed toward acute and subacute congestive or inflammatory processes, to do much in the prevention of chronic inflammatory changes.

DR. TOWNSEND.—I would add my thanks to those already expressed to the authors for the instruction received from the paper.

A point regarding the diagnosis of cancer of the prostate, associated with prostatic senile hypertrophy: Heitzman holds that in those cases in which the ducts of the follicles are still pervious, repeated examinations of the urinary sediment will show polynuclear epithelia from the prostate gland, with greater or less number of connective tissue shreds. The same author says that in all cases of carcinoma in the genito-urinary tract, including those cases of cancer of the prostate in which the ducts leading from the infiltrated portion are still pervious, repeated examinations of the urinary sediment will show cancer epithelia. These epithelia are irregular in outline, polynuclear, coarsely granular and range in size from the epithelia lining the pelvis of the kidney to those from the middle layer of the bladder. Occasional agglomerations of three to five of these epithelia may be seen, which the author terms "cancer-nests." Large shreds of connective tissue of fantastic outlines are found in addition to the epithelia.

Doubtless this important point in diagnosis will be absent in certain cases. In these there is an obliteration or occlusion of the prostatic ducts which lead from the follicles in the cancer infiltrated portion of the gland.

FERD. C. VALENTINE.—From the clinician's viewpoint, the paper offers much food for serious thought. The authors are exceedingly conservative in the deductions they make from so searching a study. Among these is the one that prostatic hypertrophy seems to originate or to have its point of departure from posterior urethritis, and, as we all must accept, posterior urethritis is due, most frequently, to gonorrheal infection of the anterior urethra. To prevent even unintentional misguidings as concerns my intentions, I must here stop to say distinctly that prostatitis of gonorrheal or other origin is not under discussion. The authors' statement, to which I have referred, would lead us to look to gonorrhea for the prime causes of senile hypertrophy of the prostate. I do not deny that for many reasons patients, especially when of the age that so often unhappily brings with it prostatism, are prone to forget unfortunate experiences of a gonorrhea in the dim past. It therefore is possible that some of our patients may, let us be charitable enough to think so, have really no recollection of one or more gonorrheal infections. But the authors nowhere say that in any of the 58 prostates so carefully examined, did they find even traces of gonococci. It is true that the splendid pictures projected on the screen show what I estimate to be a magnification of only 500 to 600 diameters; still even with this low power we should be able to have seen a suggestion of gonococci, had they been present in any part of the specimens. I do not deny that many of the patients whose prostates were the subject of the authors' studies, may have had gonorrhea and perhaps many attacks. If they had, and the authors' work when published in full will probably show that many did, then they have refuted the assertion of those who hold that the gonococcus is uneradicable. As

far as I am concerned, this magnificent paper supports the view I have often advocated here, namely that gonorrhea is not an incurable disease. In this connection I may be permitted to correct a statement, made some years ago, by one member who, alluding to gonorrhea, said that "there are some who designate gonorrhea a trifling disease, easily washed away with a few irrigations." I am not aware that any serious student of genito-urinary diseases ever made any assertion by which gonorrhea could be misinterpreted as anything else than a serious ailment. Nor did any one, to my knowledge, ever say that gonorrhea could be or ever was "washed away with a few irrigations." As, however, in the light of ever-increasing experience, properly conducted irrigations continue to be the best, most effective and promptest method of combating gonorrhea thus far known, there seems no practical reason why they should be so sweepingly condemned, except by those who will not give themselves the trouble to carefully carry out the not at all difficult technique, who prefer to adhere to the useless and injurious internal administration of drugs and trifling or painful injections with syringes. However, to revert to the subject that is really under discussion now, and the clinician's viewpoint concerning it, I have nowhere seen in literature the assertion that those given to sexual intercourse throughout a long life are less prone to senile prostatic enlargement than are those who led virtuous lives. The fact, however, remains that the greatest sufferers from large senile prostates that I have seen were men who had gone chaste to the marriage-bed and who after marriage led most exemplary, moral lives as husbands and fathers. It so happens, as is natural with one seeing very many cases of gonorrhea, its complications and sequelæ, that very many gonorrheal prostatites, acute and chronic, and abscesses of this organ should come my way. It is equally natural that I have during more than a quarter of a century of practice met many men who led the very opposite of moral lives. I do not remember one of these roués who complained, even in advanced years, of the slightest prostatic trouble. Far be it from me to even intimate that sexual profligacy may be a prophylactic of senile prostatic enlargement. I offer the experience, which may be purely individual, for the examination of better investigators and more competent students. In conclusion, I ask the distinguished privilege of felicitating the profession on having received from Drs. Greene and Brooks so valuable and important a chapter to our literature, as they have presented.

DR. VANDERPOEL.—I thoroughly agree with Dr. Brown that it is almost impossible to discuss this subject unless one has personally had experience in making sections of prostates, that is, as regards microscopical examination.

The point as to whether the prostatitis or whether the enlarged prostates are inflammatory or not is certainly most interesting. It is hardly possible, however, for one to discuss that subject unless one has personally made sections of the prostate. I must congratulate the authors of the paper, both Dr. Greene and Dr. Brooks, upon their successful work and also congratulate the section upon the advantage of having heard the results of their work, which are by far the most thorough and far reaching of any we have ever had before this section.

DR. BROOKS.—I can only thank you for your very kind remarks. I think that Dr. Lapowski has expressed a great deal better than I could the ideas Dr. Greene and myself have held. I took up the work at the suggestion of Dr. Greene to refute these ideas as not in keeping with what I had read and found myself from examinations. In studying sections of the prostate it is a

great mistake to examine only occasional specimens for one is apt to deceive himself in that way. It is only after studying a good many sections consecutively at one time that one can arrive at correct conclusions, and I think if any one will do that, he will convince himself very readily that the hypertrophied prostate is not a new growth. I thank you for your kind attention.

DR. GREENE.—I am deeply gratified at the favor with which our paper has been received. For the two other papers which I read on the subject several years ago I have not the same cause for congratulation. In the remarks that have been made I wish to say that we have tried in the paper to be careful in our statements and we have endeavored not to in any way begot any real work we have done, if we have done any, by stating ideas which we might believe to be true, but were not in position to demonstrate. Dr. Lapowski has stated very clearly, and more clearly than I feel sure we could ourselves. Anything that we may hope to obtain from the paper, and that is if it helps us in any small way to find out a little more about these conditions of the deep urethra and of the prostate and to know a little bit better about what we are doing when we treat patients, either with posterior urethritis or with the hypertrophied prostate of the aged, than we do at present in any way, it will fulfill everything we have hoped from it.

I do not mind saying in the discussion one or two things which were not in the paper and are simply my own opinion, so far as opinion goes. You can take it for what it is worth. Our work, as far as we could go, showed that prostatic hypertrophy is an inflammatory condition. The idea that a man may have gonorrhea a great many times and not have hypertrophied prostate is not a new idea. Ultzman has been quoted as saying gonorrhea prevented hypertrophied prostate. One of the first cases that ever made me think in years gone by that prostatic hypertrophy was in any way due to inflammation was a man who lived in Washington and came to me in my earliest years of practice; has been coming to me ever since once or twice a year. I have watched him for a good many years and I saw him go from an ordinary chronic prostatitis following gonorrhea, right straight along into prostatic hypertrophy of the aged, so that within the last five or six years he has taken to catheter life. My personal experience is entirely different from the experience Dr. Valentine stated to be his. I have certainly seen cases of men apparently who never had gonorrhea who complained of difficulty in micturition. I haven't been able to make up my mind whether those were cases of true prostatic hypertrophy or whether these were cases of congestion giving rise to hard edema outside of the prostate or of loss of muscular tone of the bladder. I have never seen one of them so badly off to necessitate an operation. As far as we have a history of the cases recorded in the paper almost all have had gonorrhea. Apparently the inflammation starts in the posterior urethra and we believe that whatever may cause the inflammation of the posterior urethra, not necessarily gonorrheal, may give rise to prostatic hypertrophy. I do not believe it is always gonorrhea, and it is very possible, too, that a good many gonorrheas give rise to more or less prostatic atrophy.

DR. LAPOWSKI.—It is hardly possible to agree with Dr. Valentine's statement that gonorrhea does not produce an hypertrophied prostate.

In the present state of our knowledge of the causes of an hypertrophied prostate, we neither can deny or affirm the important, active rôle of the gonococcus. We lack both clinical observations, and microscopical and bacteriological investigations upon a larger scale, than hitherto undertaken.

To the clinical histories of hypertrophied prostates reported by writers, few pay attention to the question of the previous existence of a gonorrhea. On the other hand there is, to my knowledge, not one case reported where a hypertrophied prostate existed and the further presence of gonorrhea excluded with certainty. It is hardly possible to expect to find with our present staining methods a living stainable gonococcus in the tissues of a degenerated prostate, the soil of which is not appropriate for the growth of the gonococcus. But we see in a hypertrophied prostate morphological changes, which are exactly alike to the pathological changes produced in other gonorrheal processes as regards the time of their appearance and their anatomico-pathological forms. Strictures of the urethra of post-gonorrheal origin appear later, and not only the changes confined to one portion of the urethra, they do not spread by continuity, but they are disseminated as are the changes in a hypertrophied prostate.

Selections.

The Changes of the Thyroid Gland in Patients Suffering with Syphilis During the Second Incubation and During the Period of Eruption.

—A. P. POLOTAVTZEF (Prof. Zehner's Clinic) (*Russian Jour. of Cutan. & Ven. Dis.*, Vol. I., 1901, p. 85.)

Eighty-five patients afflicted with syphilis formed the basis of the writer's paper. In forty-five patients the changes of the thyroid gland have been noticed before the appearance of the early eruption. In the remaining forty the measurement of the gland began with the outbreak of the syphilitic rash, usually the measurement was taken simultaneously with the weight of the patient.

The author arrived at the conclusions that (1) the thyroid gland is not indifferent to the circulation through the body of a syphilitic poison. The gland takes part in the disease, and (2) sometimes its involvement can be demonstrated by its increase in size; (3) this increase is not always a passing one, sometimes it leads to permanent changes (colloid degeneration—in the writer's case—autopsy). The increase in size usually begins simultaneously with the appearance of the eruption and reaches its maximum when the eruption is at its height. In some cases where changes in the action of the heart were marked during the period of early eruption, the thyroid gland was usually found enlarged.

The Question of Immunity of Animals to the Bacillus of Soft Chancre

—By T. GIMMEL (Metchnikov's Laboratory) (*Russ. Jour. of Cut. & Ven. Dis.*, Vol. II., 1901, p. 306.)

The writer's aim was to cultivate the bacillus upon accessible media, explain the conditions of animal immunity and by increasing the virulency of the bacilli and decreasing the immunity of the animals, make the animals susceptible to the infection. He succeeded in all the three points. Inoculating coagulated blood of guinea pigs with the exudation of the chancre he obtained in 6-8 hours a good culture of the bacilli. By the aid of lactic acid or antialexin, the virulency of the bacilli is increased. It kills the guinea pigs when injected into the abdominal cavity in twenty hours. The same alexin diminishes the immunity of the animal, when injected into it.

MORIZ KAPOSI.

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Original Communications.

THE USE OF THE CAUTERY ON THE PROSTATE THROUGH A PERINEAL OPENING. NEW METHOD WITH PRESENTATION OF INSTRUMENT AND REPORT OF CASES.*

BY WM. N. WISHARD, A.M., M.D.,
Indianapolis, Indiana.

IN presenting a new method of using the cautery, the writer does so with the belief that more extended experience will justify the opinion which he entertains, that the cautery when used upon the prostate should be used with the operative area under the direct observation of the operator and that preliminary opportunity for digital examination of the prostatic urethra, vesical orifice and bladder should be given, and that after the use of the cautery or any other radical operation upon the prostate, bladder drainage should be secured. Our present means of determining the exact character of the intra-vesical and intra-urethral mechanical obstructions produced by enlarged prostate are somewhat limited so far as they relate to examinations made prior to operating. Changes in the condition of the urine, functional disorders of the bladder and digital examination by the rectum afford very inadequate evidence of the character of the obstruction. The increase in the length and the angle of the prostatic end of the urethra, as shown by measurement on a catheter from the meatus to the point where urine is obtained, and the use of exploring instruments, is of considerable value. The use of the ordinary cystoscope is, in the writer's experience, rather difficult and usu-

*Read at the Annual Meeting of the American Association of Genito-Urinary Surgeons, at Atlantic City, April 29, 1902.

ally unsatisfactory. The real mechanical relation of the prostatic outgrowth to the disturbed urinary function can only be revealed by digital and ocular examination, and even then is often difficult to understand. In the writer's experience, a much better idea of the character of the enlargement has been obtained in using the cystoscope through a perineal opening, than in introducing it by the natural channel. Used by either of these methods, the cystoscope affords little information in regard to growths projecting into the prostatic urethra and its greatest value is in outlining sharp irregularities about the vesical orifice and within the bladder. Some twelve years ago, in operating upon his first case for the removal of an enlarged prostate by a combined perineal and suprapubic operation, the writer found a massive "pear" shaped hypertrophy projecting into the bladder, and also well-marked intra-urethral growths. A V-shaped portion of the intra-vesical growth was removed through the suprapubic wound. From observation of the use of the galvano cautery for removal of nasal hypertrophies, the writer was lead to conclude that benefit might be obtained by direct application of the cautery through a perineal wound. (See "Notes on Surgery of the Prostate," JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, March, 1892.) Direct use of the cautery was made in this and in other cases at that time for the double purpose of removing small obstructing growths within the prostatic urethra and about the vesical orifice, and for the reduction in size of the lateral lobes by direct puncture from within the urethra. The method then employed was the introduction of a small tubular speculum through a perineal wound and the use of reflected light from a head mirror. A varying number of punctures was made, to the depth of one-half to three-quarters of an inch. Definite location of the desired point of insertion of the cautery was obtained by both digital and ocular examination. The tenaculum was inserted through the perineal wound along the index finger and the point of the tenaculum directed into the most sharply presenting obstruction. The small speculum was then slipped over the handle of the tenaculum and passed into the prostatic urethra, when, with a little tension on the tenaculum, the tissue was drawn sharply into view at the farther end of the tube. The cautery was also used without the aid of the tenaculum in cauterizing hypertrophied tissue about the vesical orifice. The writer ventures to refer to the method then employed because it is, so far as he is aware, the first effort made to use the cautery through a perineal wound and upon tissue exposed to the view of the operator. The view was then expressed that while the cautery was more easily manipulated than the knife or scissors in the removal of growths about

the vesical orifice through a perineal opening, still it did not appear to be suited to growths of large size. Because of the imperfect method available, the use of the cautery by the foregoing method was not subsequently relied upon. About two years ago, a case was seen in which a suprapubic opening had been made for drainage during an attack of complete retention. At the time the writer saw the case, the suprapubic opening was still in use and it was impossible to introduce a catheter or any other instrument through the urethra into the bladder. The patient's condition at this time was such as to make a prostatectomy inadvisable, and a perineal section was therefore made under local anæsthesia, in the hope of securing sufficient dilatation of the prostatic urethra to permit the use of the catheter and secure closure of the suprapubic opening previously made. A very large growth was found extending high into the bladder and greatly obstructing the introduction of instruments. A Koch's air dilating cold lamp cystoscope was finally introduced through the perineal wound and through it the long straight cautery was used to advantage in cauterizing the growth. Catheterization was subsequently quite easy. In another case shortly afterwards, the same cystoscope and cautery were introduced through the natural channel and the cautery applied to a limited extent on the posterior margin of the vesical orifice, with the result of considerable improvement in bladder function. A movable cautery could easily be adjusted to a cystoscope of this variety by a modification of the alligator-forceps arrangement hereinafter described in connection with a perineal tube.

About six months ago, the writer devised a special instrument for the application of the cautery through a perineal opening (presented to association). It consists, as you will observe, of a straight tube with an oblique opening at its distal end, somewhat in the form of an oid-fashioned rectal speculum of this pattern. The tube is forty-two millimeters in circumference and six and one-half inches in length without the obturator. It has an auxiliary tube carrying a small incandescent lamp of low heating power, which is exposed through a small window near the distal end and on the longer side of the tube. On the short side of the distal end of the tube, and almost directly opposite the lamp, a groove is cut in the side of the tube for the insertion of the cautery. The groove is intended to give greater rigidity to the knife and greater certainty in the direction and length of the incision. The forms of the cautery thus far used are here presented and consist in three modifications of the cautery knives, used for nose and throat and other galvano-cautery purposes. It will be observed that one is of greater length than the others and has an oblique angle

corresponding somewhat to the angle of the Bottini knife. These cauteries have a comparatively limited reach, which is, however, somewhat increased by bending the wire near the cautery end and tilting the tube while the cautery is in use. There, is, as you will observe, a plug containing a diagnostic window for closing the outer end of the tube. On the side of this plug is a small nipple, through which air can be pumped into the bladder. A very good view of the prostatic urethra and vesical orifice can be obtained without air dilatation, but the latter is an advantage when the instrument is carried on into the bladder. By counter-pressure with the finger in the rectum, and by tilting the instrument, a better view is obtained of the area immediately behind and on the sides of the vesical orifice.

In the application of the cautery by this method in the first case, it became apparent that greater length to the cautery knife was necessary, or its use would be limited. In the endeavor to overcome this difficulty and to extend the use of the cautery to intra-vesical obstructions, the principle involved in the construction of the so-called "alligator-jawed" forceps was utilized in the more recently devised instrument. By this newer instrument, the cautery knife can be made any length or shape and can be used through the tube, while the bladder is dilated with air and while the operator inspects the procedure. It will be observed that parallel bars carrying the cautery are inserted through and become a part of the plug which contains the diagnostic window. The cautery is introduced straight, and brought into position within the bladder over the growth at an oblique angle by manipulating the forceps-handle arrangement on the outside. The lamp is screwed on the end instead of being carried through the auxiliary tube. The auxiliary tube is made larger and utilized for carrying a lens system similar to that used in the ordinary cystoscope, and which enables the operator to see at a right-angle and to observe the cautery knife as it is brought down over the growth within the bladder. It will thus be seen that, with the bladder dilated with air, the operator can obtain a direct view about the vesical orifice or within the bladder, by looking through the diagnostic window in the air plug, or by looking through the lens system in the auxiliary tube he can see at a right-angle. If preferred, the operator can dispense with the lens system attached to the prostatic tube and depend upon the direct view through the window in the air plug. With either of these tubes, by direct inspection through the diagnostic window, better view is obtained of the inside of the bladder than by any instrument the writer has ever used. The instrument is of great value for diagnostic purposes alone. The snare can be used in the occasional cases of peduncu-

lated middle-lobe growths. In pear-shaped or collar-shaped growths, the growth can be split from above downward in two or three positions and a cautery snare placed around the segments, and they can be snared off if desired.

With the first tube and a similar one slightly smaller, and the special shaped cauteries presented, the writer has operated upon four cases where symptoms of prostatic obstruction had to a greater or less extent covered periods of from two to fifteen years. In all four cases the operation was done under local anæsthesia and was preceded by dilatation of the prostatic urethra and perineal drainage over periods varying from one to eight weeks. In none of these cases after prolonged drainage and dilatation was the patient able to empty the bladder by voluntary effort. When the bladder was filled with boracic acid solution and the tube removed and voluntary effort made by the patient to empty the bladder, the smallest quantity of residual fluid was four and one-half ounces. In one case, at the time the cautery was used retention was absolute after eight weeks' drainage, as the patient could pass no fluid whatever by voluntary effort. In all four cases the patients are now dependent upon voluntary urination. One of them has no residual urine upon introducing the catheter after urination. In another, a man aged eighty-two, the writer found upon two recent examinations that at one time there was one drachm of urine left in the bladder and at a subsequent time the catheter obtained three drachms. The other two, the writer is not able to report as to the exact quantity of urine, if any, retained in the bladder after voluntary urination, but information from the physicians in charge of these two patients is to the effect that the patients have no bladder symptoms whatever. All four patients are able to retain their urine from three to five hours in the daytime. The writer has no special theory to present in reference to the influence of the cautery upon the hypertrophied prostate, but it is a matter of interest that in these cases, the cautery was used in a comparatively superficial manner about the vesical orifice and within the bladder. In one of them the smallest and thinnest cautery here shown was used, and in this case there is now no residual urine. In all of them the primary perineal section was made for the relief of an acute retention. In two of them the catheter could not be introduced and in the other two the catheter was introduced but blood clots so filled the eye that its use was abandoned and a perineal opening made. Very naturally the comparatively superficial incision made raises the question as to whether the good result was not due to prolonged drainage. Attention in this connection should be drawn to the fact heretofore stated, that there was residual urine

in all of them, and in one complete retention, after prolonged drainage. If the dilatation and drainage are to be credited with the result, it would seem that better bladder function should have existed after prolonged drainage was used and before the application of the cautery. Dr. Bryson has recently called attention to the great vascularity of the area immediately about the vesical orifice, and to the greater danger of hemorrhage where the prostatic capsule is opened in this locality, than where the entrance is made from below. This is a fact which has impressed itself upon all who have had an extended experience in the various methods of attacking the prostate. It would seem probable, therefore, that the cautery exerts a marked influence upon the blood supply of this vascular area and produces nutritional changes. Certainly the depth of the incision in the four cases reported is not great enough to leave a deep groove like the Bottini knife. The newer instrument here presented has not yet been used, and the four cases reported were operated upon by the first model shown. With the newer instrument here presented, a groove can be burned exactly similar to that made by the Bottini cautery. As will be seen, there are three knives of different length, and the longer is practically the same as the Bottini knife. The length or the depth of the incision can be accurately gauged. By holding the outer end of the tube firmly and turning the gauge screw, the depth of the incision is indicated on the scale.

Chetwood has recently devised an instrument for use through a perineal wound, which appears to be susceptible of easy manipulation and has the merit of simplicity in construction. It is, in a sense, a modified Bottini instrument, but does not provide for air dilatation of the bladder or for direct inspection of the operative area in placing the cautery.

It may be of interest to mention the fact that the primary perineal section and dilatation of the prostatic urethra in the four cases reported was made under local anesthesia. The subsequent use of the cautery, after the bladder had been drained, was also in each case made under local anesthesia. The writer does not regard a perineal opening made under local anesthesia as a procedure involving any special risk or any special difficulty in its execution. He has employed this method exclusively in the past three years, where the purpose has been to obtain bladder drainage alone. He has also used this method of anesthesia in several cases of external urethrotomy, and in three cases has removed small stones from the bladder. Dr. Bransford Lewis has devised a depositor for the introduction of cocaine tablets into the urethra, which the writer has had the pleasure of seeing him use, and which is apparently a great improvement over the use of

solutions of cocaine in cocainizing the urethra. The quantity used is less, and it can be more directly applied and limited to the desired area. Schleich's infiltration method was used in the writer's cases for the perineum. In the four cases herein reported, the finger was passed into the wound and the prostatic urethra dilated as far as the finger would reach, immediately after the opening was made. In one case the vesical orifice could not be reached by the finger, and a pair of lithotomy forceps was passed into the bladder and the handles of the forceps spread, in order to dilate the vesical orifice. More or less pain was experienced in each case when the finger was forcibly passed into the prostatic urethra and when the vesical orifice was dilated. The pain was of brief duration, however, as but a few seconds were required for this procedure, and in but one of the cases did the patient complain that the pain was extreme. As the primary operation only contemplated moderate dilatation and subsequent drainage, the procedure can scarcely be classed as a grave one. The cautery was used after the bladder had been rested and the element of congestion in the bladder and prostate relieved by drainage. In only one of the four cases did the patient complain of decided pain when the cautery was used. While the writer does not regard general anesthesia as necessary for making a primary drainage opening, it undoubtedly should be used in some cases at the time the cautery is applied. Its use will, of course, greatly facilitate the ease and accuracy with which the cautery is manipulated.

In presenting a new method of applying the cautery, the writer does not desire to make a special plea for this or any other method. He is free to admit that his leanings have heretofore been decidedly towards enucleation. His present interest in the use of the cautery has resulted from the many recent favorable reports of the Bottini operation. He ventures the hope that the instrument here presented will prove of diagnostic value, and where it is deemed advisable to use the cautery it will make it possible to do so with the operative area under direct inspection by the introduction of the instrument through a perineal opening.

He is glad to express his obligation to the Electro Surgical Instrument Company for their aid in enabling him to develop the instrument.

Report of Cases.

The following reports from physicians in charge of these cases came to hand since this paper was written.

Case I.—M. W., age eighty-five years. Bladder symptoms prior to operations about two years; urination gradually becoming more dif-

ficult; frequently accompanied by pain. Catheter used prior to operation. Operated Aug. 4, 1901, for relief of acute retention of twenty-four hours' duration. Bladder drained about three weeks and cautery applied through tube. At present has about one ounce of residual urine. Urinates every two or three hours during the day and three times at night. The catheter is not now used at all.

Case II.—A. M. R., age sixty-nine years. Bladder symptoms prior to operation fifteen years, including three attacks accompanied by considerable bleeding. No systematic use of the catheter prior to operation. Operated Aug. 8, 1901, by perineal section. Bladder drained about eight weeks and cautery used through tube. At present urinates about every two hours in the daytime and from one to three times at night. After voluntary urination catheter gets no urine part of the time, and occasionally gets one-half ounce. Does not use catheter at all.

Case III.—J. J., age eighty-two years. Bladder symptoms fifteen years. Catheter first used ten years ago, but has only been used occasionally since then. The patient has very frequent attacks of difficult urination. Operated Nov. 11, 1901, by perineal section, for relief of complete retention. Bladder drained two weeks and cautery used through tube. At present patient urinates once every three or four hours in the daytime and about three times at night. Greatest quantity of residual urine found at present three drachms. Patient urinates voluntarily and with ease, and does not use the catheter.

Case IV.—P. C., age seventy-two years. Bladder symptoms three years prior to operation, necessitating frequent use of catheter for past two years. During the past year ten or twelve attacks of greater or less severity, usually accompanied by bleeding. Operated Jan. 3, 1902, by perineal section, for the relief of complete retention. Drained two weeks and cautery used through tube. Now urinates every two or three hours during the day and two or three times at night. Passes urine now with ease and catheter gets one drachm of residual urine.

EIGHT CASES OF TUMOR OF THE TESTICLE: THE CLINICAL HISTORY, THE PATHOLOGIST'S REPORT, THE END RESULT.

BY CHARLES L. SCUDDER, M.D.,

Surgeon to Out-patients, Massachusetts General Hospital and Assistant in Clinical and Operative Surgery, Harvard Medical School, Boston, Mass.

THE following eight cases of tumor of the testicle have been studied clinically and pathologically with great care. The cases were operated upon at the Massachusetts General Hospital by different surgeons, and it is through the courtesy of these gentlemen that I have been permitted to make this study. No final conclusions can be drawn from so few cases, but the group is suggestive. Pathological examinations were in every instance made by Dr. W. F. Whitney of Boston. The series of illustrations accompanying these cases illustrate definite types of malignant disease occurring in the testicle.

Case I.—A. M., forty-one years old, M. G. H. Record, Vol. VIII., p. 113, October, 1895.

No tubercular, syphilitic, or traumatic history. The left testis has been swollen for three months. It is somewhat enlarged, slightly irregular, hard, not tender. No glandular enlargement. Orchidectomy.

Dr. W. F. Whitney's report after examination of the organ: A large symmetrical testis. On section is seen a homogeneous, pale, slightly translucent surface marked by opaque whitish areas. Microscopical examination showed a growth of spindle-celled tissue, with here and there areas of star-shaped cells having gelatinous appearing tissue between them. Tubules could be seen lying in the midst of this tissue. *Diagnosis: Myxosarcoma.*

Five years after this operation for the removal of the myxosarcoma of the left testis, the man is well and in good health.

Case II.—P. F., fifty-seven years old, M. G. H. Record, Vol. 304, p. 119, August, 1895.

One year and a half ago received an injury to the right testis. Six months after this the testis began to increase in size. It has continued to grow larger up to the present time. At present the right testis is three times its natural size. The surface of the tumor is smooth. It is firm to touch. The cord is not enlarged. No glandular enlargement. Orchidectomy.

Dr. W. F. Whitney's report after examination of the organ: The testis is enlarged. Upon section the surface is translucent and moderately firm. Microscopic examination showed large spindle cells and cells of other shapes. There are also solid masses of round cells. *Diagnosis: Myxosarcoma.*

Five years and six months after this operation the patient is well and strong.

Case III.—C. A. H., fifty-four years old, M. G. H. Record, Vol. 327, p. 253, January, 1898.

Case IV Large cells and intercellular substance are seen. Large round-celled Sarcoma, sometimes classed as Endothelioma.

No tubercular, syphilitic, or traumatic history. The left testis has been swollen without apparent cause for four months. The left testis is much enlarged. Its surface is uniformly smooth. It is firm and there is slight tenderness upon deep pressure. The glands are enlarged in both groins. Orchidectomy.

Dr. W. F. Whitney's report after examination of the organ: The testis is enlarged to three times its normal size. The gland structure is replaced by a lobulated new growth of a grayish white surface, which is soft and medullary in consistence and is marked by opaque yellow areas of necrosis. The microscopical examination showed large

round cells separated by a little pale intercellular substance, in the midst of which glandular elements are to be seen. *Diagnosis: Round-celled sarcoma.*

Three years after this operation for the removal of the round-cell sarcoma of the testis, the man is well and in excellent health.

Case IV.—S. 9811—1. J. J. C., adult, M. G. H. Record, Vol. XXX., p. 118, November, 1898.

The right testis could always be felt in the inguinal canal, but it never passed through the external abdominal ring; it was undescended.

Case V The remains of Tubules shown and the growth of inter-tubular areas as seen, composed of small round cells with a little fibrillated intercellular substance. Vascular openings of the nature of sinuses rather than vessels of the wall, areas of minute necrosis, are seen. Small round-celled Sarcoma.

For two years the testis has increased in size gradually growing larger. Three months ago it increased very rapidly in size. It was then tapped and bloody fluid removed. An oval tumor, seven by four inches, exists in the right inguinal region, parallel with the line of the inguinal canal. The skin covering the swelling is edematous and red, and fluctuation is noticed corresponding to the reddened area. There is no impulse to be felt when the man coughs. The cord is apparently thickened. Orchidectomy.

Dr. W. F. Whitney's report after examination of the organ: An oval growth (13 cm. in diameter) with a smooth external fibrous

locking capsule. Upon section of this tumor, the surface appeared lobulated, gray, opaque, soft. In places the surface was necrotic, in other places there were seen soft hemorrhagic cysts. Microscopical examination discovers masses of very large round cells separated by only a little intercellular substance. *Diagnosis: Round-celled sarcoma.* See illustration Case 4.

Two years and a quarter after operation for the removal of this round-celled sarcoma of the testis, the man is well and in good health.

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Case VI. Tubules of Testicle seen. Cells proliferating, breaking through and infiltrating in all directions. Adeno-Carcinoma.

Case V.—S. 983—3. C. L. O., twenty-eight years old, M. G.H. Record, Vol. XXIV., p. 160, March, 1898.

Double congenital herniæ. An undescended left testis. Three months ago an abdominal tumor in the left bladder or hypogastric region slightly to the right side began to appear. A poorly developed man; presented a right iliac and hypogastric tumor. It is smooth in outline; firm, slightly elastic; movable laterally, not longitudinally. It is dull on percussion and slightly tender. The left testis is not in the scrotum. Operation: Tumor removed. Peritoneal fluid was blood. The tumor was adherent posteriorly.

Dr. W. F. Whitney's report after examination of the tumor. An oval tumor (15x10 c.m.) shape of testicle. One portion of the tumor (the body) was covered with a smooth shining membrane on which

were numerous large blood vessels. This portion was of a dark reddish blue color. Another portion of the tumor (corresponding to the epididymis) was an opaque grayish white lobulated medullary growth. Section through the tumor showed the centre to be occupied by an hemorrhagic soft stringy tissue while the periphery was homogeneous pale gray. The mass had a thin elongated tissue attachment, which contained numerous vessels, but there was present nothing which corresponded to a vas deferens. Microscopical examination showed the growth to be composed of large round cells, many with several nuclei,

Case VII. Glandular tissues seen separated by many cells, fibrous and myxomatous tissues seen Cysto-Adeno-Sarcoma.

having a little granular intercellular substance. No normal testicle tissue was discovered. *Diagnosis: Round-celled sarcoma.* See illustration Case 5.

Seven months after operation he died. The spinal cord was involved in a similar growth from the eleventh dorsal to the first lumbar vertebræ.

Case VI.—S. 93—4. E. H. M., thirty-eight years old, M. G.H. Record, Vol. XXXIV., p. 6, March, 1899.

Two and one-half years ago trauma to the left testis. One year ago a second traumatism to the same testis. Since this last injury the testicle has remained swollen. The left testis is the size of a large

white potato, lobulated, moderately hard, soft in certain parts, not tender to touch. No glandular enlargements. The cord was not enlarged. Orchidectomy.

Dr. W. F. Whitney's report after examination of the tumor: A greatly enlarged testicle, measuring 8 cms. longest axis, somewhat lobulated. The body of the testis was replaced by a soft greenish medullary tissue. Microscopical examination finds that in places tubules can be seen with proliferating epithelium and these can be traced

Case VIII. Cartilage tissue seen. Glandular tissue lined with cylindrical Epithelium tissue between Glandular elements, fibrous and in many places associated with growth of striped muscular fibre and Epithelial cell masses which might be regarded as cancerous Teratoma.

into the new growth, where in places the cells have a slightly tubular arrangement; in other places the cells are in solid masses separated by fibrous septa.—*Diagnosis, Adeno-carcinoma.* See illustration, Case 6.

Two years after the removal of this adeno-carcinoma of the testicle the man is well—in good health.

Case VII.—S. 92-3. J. E. H., adult, M. G. H. Records, Vol. XXXII., p. 144, February, 1899.

Nine months ago, after a blow, testis was painful and enlarged gradually until it was the size of an orange. The surface was smooth.

The swelling was hard; the cord was normal. He lost ten or fifteen pounds in weight. Orchidectomy.

Dr. W. F. Whitney's report: The testicle is enlarged to twice its natural size and is quite smooth upon the surface. On section it was found to be quite largely occupied by a new growth, which was exclusively necrotic in the central parts, but about the periphery was grayish, rather translucent, and with small cysts through it. Microscopical examination showed the remains of tubules surrounded by a large-celled tissue in places having distinct star and spindle-shaped cells. Here and there the tubules were cystic and dilated. *Diagnosis—Cystosarcoma.* See illustration, Case 7.

One year and three months after operation the man died. New growths were found in the spleen and liver, as well as all over the body.

Case VIII.—S. 959-2. J. H. G., fifty-one years old, M. G. H. Records, Vol. 351, p. 140, October, 1899.

No tubercular, syphilitic or traumatic history. One year ago a swelling began of the left testis. This swelling increased gradually and was associated with a dragging feeling in that side of the scrotum. The testicle was the size of a cocoanut, tense, non-translucent. Orchidectomy.

Dr. W. F. Whitney's report was as follows: A tumor, the general shape of the testicle, 18x12 cms. and weighing 1220 grames. The outline is slightly lobulated. On section, it is of an opaque yellow aspect with small translucent areas throughout, especially in the periphery. Microscopical examination showed glandular tissue of a tubular character, fibrous tissue, cartilage and embryonic muscular fibres. In places there were small cysts. *Diagnosis: Teratoma.* See illustration, Case 8.

Six months after the removal of this teratoma of the testicle the patient died.

LICHEN PLANUS AS A VESICULAR AND BULLOUS AFFECTION.*

BY CHARLES WARRENNE ALLEN, M.D.,

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Consulting Genito-Urinary Surgeon to the City Hospital, etc.

GENTLEMEN: It is not my intention to claim, as the title of these brief remarks might cause one to infer, that lichen planus ever exists with moist lesions exclusively or that the latter predominate in any given case.

It has been my privilege to observe during the past year two patients in whom vesicles and bullæ have occurred during the course of their lichen planus, and I desire at this time simply to call attention to a clinical observation so far as I am aware now recorded for the first time that in lichen planus bullæ can at times be developed at will. I desire also to call attention to a plan of treatment in the beginning disease, and especially in the recurrent outbreaks of chronic or sub-acute cases which seems to prevent the eruption from spreading locally or becoming generalized.

Case I.—Mr. E., æt. 52. Financier. First came to me in January, 1899, with a generalized lichen planus which had begun in the region of the axillæ about three months previously and had gradually extended over the trunk and extremities. There were a few characteristic lesions upon the forehead. As to diagnosis, I will merely state that in the following April, after very marked improvement, a consultation as to therapy was held with Dr. A. R. Robinson, who had no hesitancy even at that time in confirming the diagnosis.

In May, after prolonged arsenical medication, there was a copious eruption of bullæ, some with clear contents and some hemorrhagic, upon the feet.

Four days later, after pain, burning and itching in the region of the right chest-wall, two Zoster plaques appeared; one four inches beneath the nipple, the other opposite the eighth dorsal vertebra. The whole painful area, including the plaques, was painted with benzoated collodion. Fowler's solution, now at daily dose of 33 drops, was gradually decreased.

* Read before the American Dermatological Association at Chicago, June, 1901.

Five days later there were seen scattered over the body numerous clear frank vesicles, and a lesser number of minute vesico-pustules corresponding to those which have been described as aberrant vesicles of Zoster. A month later the body was free from all signs of lichen planus and patient was sent to Aix-les-Bains for a course of baths.

On October 20th patient came to see me, having been home from Europe two weeks. I found that the lesions of lichen which had remained away all summer were beginning to return.

I curetted some of the beginning papules, applied chrysarobin colloidion to others, ordered a diet, and gave mineral waters freely. The attack was recovered from and I did not see patient again until the following June (1900). There was at that time, among others, a group of twelve lesions upon the lower back. Upon scraping these flat papules I found that they were quite readily transformed into hemorrhagic vesicles (or minute bullæ) whose walls did not readily rupture. It was not my first experience of this kind and I made a note in my book that this was somewhat characteristic of lichen lesions since other papules did not act in this way. I left these blood blisters to take care of themselves, curetted other lesions and painted still others with the chrysarobin. Within a few days the transformed lesions had disappeared as promptly as those curetted and did not recur. This acute outbreak also ceased and for six months I did not see the patient. Since December last, when there was again a recurrence of lesions in the lumbar region, about the folds of the groin, genitals, thighs and armpits, I have seen the patient almost weekly, and at times more frequently. No medicine has been given, and I may state here that no arsenic was given in the two preceding outbreaks when vesicles containing bloody serum were produced so readily.

I have continued the plan of treatment of curetting the lesions as fast as they form or of transforming them into blood-blisters, since the latter are found to dry up and disappear quite as promptly as the lesions entirely scraped out.

Following this plan there have been no subjective symptoms, no itching, no generalization of eruption and no marked spread. In the infra-axillary region rows of papules have at times formed in the intervals between the visits. Each papule corresponding to a follicular opening; or "goose-flesh" elevation, the direction of the line corresponding to the natural line of implantation of the sweat duct openings for the region involved.

Occasionally, with the aid of a magnifying glass, minute red dots could be made out as a continuation of this line downward, and these could be rendered more apparent by scraping, but once scraped with

the curette even without rupturing the skin they would disappear and no new lesions would develop in the immediate neighborhood. Upon the skin of the lumbar region numerous lesions could at times be raised into tense rounded vesicles with the central shiny thickened epidermis still intact making a striking and peculiar clinical demonstration of *scaly* vesicles. At times also vesicles have arisen spontaneously under strips of adhesive mercurial plaster, which when pricked would pour out a droplet of clear yellowish serum.

Case II.—This relates to a Miss S., æt. 38, who came to my office in November, 1900, with well marked lichen planus. There was a history of a similar eruption having begun on the wrists two years before and disappearing completely. The present eruption had begun during the preceding summer, first about the ankles, after mosquito bites, she says, which caused intense itching and much scratching. Just before coming to me, and while under treatment by internal as well as external measures, there was an outbreak of water-blisters upon the foot soles, which the patient says were filled with a pink liquid. From above the knees to the backs of the feet the confluent plaques make an almost solid mass of infiltration. Upon the chest there are rows of lesions like the beads of a rosary as well as small grouped lesions.

As to the diagnosis in this case, I will state that the eruption soon became generalized, extending from the scalp margin, over the back of the neck, and involving the feet, and in this stage I presented the patient at the New York Dermatological Society and again some months later, when the lesions had almost wholly disappeared. All those present agreed with the diagnosis. On January 12th of this year there was a second outbreak of bullæ upon the feet especially implicating the soles and sides of the feet. No arsenic had been taken since Dec. 22nd (twenty days).

In this case it has been possible to scrape large flat polygonal lesions and transform them into "water-blisters," which would spontaneously disappear. The patient has practiced this herself under my directions and has noted the beneficial results. Many large hypertrophic verrucous or corneous lesions (lichen corneus) I have curetted and removed in this way, as well as the beaded and grouped papules on the chest.

I am not aware that up to the time of my directing attention to curettage as a valuable means of removing the lesions of lichen, by speaking of it at the New York Dermatological Society last year, any published reports upon the method have appeared.

I believe it has a distinct value, not alone in early cases in which the papules are of very soft consistence, but also in the late warty

plaques, whose bases break down much more readily under the sharp spoon than one would be led to believe before a trial.

One of my patients has made the observation in her own person that scratching is at times capable of producing new lesions which "raise up" somewhat like the smaller lesions of urticaria. In piercing one of these fresh lesions a minute quantity of serum can be obtained which is not the case, I believe, as a rule, in urticaria.

Bullæ have long been known to occur in lichen, but their relation to the affection has been too generally ignored and often misinterpreted. Many have looked upon their presence as an accidental complication or due wholly to the use of arsenic. American more than English writers have ignored or denied the possibility of vesicular, bullous, or pustular lesions as occasional features of the disease, and we should be the first to make our text-book descriptions comply more closely with the facts. Dr. Fox, in his article on lichen in Morrow's system, says, "Although the papules in lichen planus never change into vesicles or pustules, I have seen a patch upon the tibial aspect of the leg become the seat of ulceration." At the 289th meeting of the New York Dermatological Society this author showed a case of lichen planus with "pustulation which seemed to be a part of the eruption."

Sequeira* mentions the early occurrence of bullæ before arsenic had been taken.

Pringle† saw a case profusely bullous soon after admission to hospital, and has observed four cases of Zoster in the course of generalized lichen planus apart from arsenical treatment. Kaposi and Leredde have also made the observation that bullæ could occur when arsenical treatment was not a factor.

Further clinical evidence that Zoster may occur independently of arsenical treatment is given by Lusk's case‡ in which marked Zoster was observed during the administration of bichloride of mercury. Engman in the same issue of the *Journal* refers to lesions having the appearance of small flabby bullæ from which the fluid had escaped or become absorbed leaving a shrivelled milky white pellicle. This condition I have likewise noted and have seen actual bullæ with fluid contents still intact in lesions which have developed beneath mercurial plaster applied over a patch of lichen planus. Other lesions often look as though they contained serum, but it is usually only by such irritation as I have described that they become transformed into actual bullous lesions.

In Engman's case the base was found dry on removal of the epi-

* British Journal of Dermatology, December, 1900.

† Loc. Cit.

‡ Journal of Cutaneous and Genito-Urinary Diseases, May, 1901.

dermis, but from my personal observations I can readily believe that fluid had existed in the lesions he describes. Others speak of yellowish or whitish lesions which simulate vesicles or vesico-pustules and yet as Brocq says "when scraped not the slightest vestige of fluid is present."

He says, however, that bullæ may complicate the disease, and a variety of lichen is mentioned in which, especially when the general condition of the patient is not good, pemphigoid bullæ appear here and there disseminated upon preëxisting lesions or even upon the healthy skin.

Now, without entering upon anatomical considerations, I desire to state a few points upon which my belief is based that vesicles and bullæ may be at times an essential part of the process designated as lichen planus and not mere accidental and complicating forms.

While pathologists are not in full accord it is quite clear that lichen planus constantly develops around a sweat coil in the upper layers of the corium. The majority of observers seem to find that the umbilication is due to the middle portion of the papule being held down by a more or less altered duct of a sudoriparous gland or the corneous cone which forms in its upper portion.

A certain proportion of patients have their first eruption in warm weather when the sweat glands are active, and it is with the advent of the heated term that recurrences are often noted. In many patients the parts rich in sweat glands are primarily or notably implicated, viz.: the axillæ, folds of the groins, the genital and lumbar regions, and Crocker has called attention to the fact that the infantile form is seen in those especially who perspire freely. It would appear, therefore, that the outpour of serum producing the vesicle might have a connection with vitiated coil gland secretion. The only confirmation of the clinical facts which I have seen in recent literature is the observation of Whitfield,* who found in three nodules of lichen planus excised a definite vesicle below the epidermis. While the clinical facts here embodied may not aid materially in elucidating any of the unknown features of lichen planus, they should serve to modify text-book descriptions.

It does not seem quite proper to state, as the books do, that the papule persists during its whole course without ever becoming transformed into other lesion of a greater degree of efflorescence, or that they accomplish their whole evolution in all instances under the aspect of papules.

30 East Thirty-third Street.

* British Journal of Dermatology, Dec., 1900.

Society Transactions.

FRENCH SOCIETY OF GENITO-URINARY SURGERY.

FIFTH SESSION.

(*Annales des Mal. d. Org. Génito-Urin.*, 1901, p. 1370.)

(Conclusion.)

Contributions to the Physiology and Pathology of Incision and Extirpation of the Kidney.—DR. ESCAT wished to add a word on the value of the reno-renal reflex as a surgical indication. He recalled 2 cases, seen by him 3 years before, of unilateral pyonephrosis consecutive to ureteral fistula of surgical origin, which presented marked symptoms of uremia.

In one case extirpation of the affected kidney as advised by him was done by the surgeon consulting him, and lead to cessation of the uremia. The second, an exactly similar case, refused operation and died with symptoms typical of uremia. Twenty days before death he was called in, there was complete anuria, incessant vomiting; death was imminent. He was able to open up the ureteral fistula with a stylet; the flow of urine was re-established, the vomiting ceased and the patient survived 20 days.

He is convinced that in unilateral pyelonephritis the patients die more frequently from uremia than from the infection.

DR. LOUMEAU recalled the case of a patient with advanced interstitial nephritis who became progressively anemic from a profuse unilateral hematuria which had resisted all medication, and had reached such a degree of exhaustion and feebleness that she was almost *in extremis* when he operated for lumbar nephrectomy. The hemorrhage was checked and the patient seemed to be rallying, but died on the twentieth day after operation. He thinks perhaps the remaining kidney was insufficient and that had a nephrotomy been done with a view to checking the hemorrhage and preserving an organ which had not completely lost its function a more favorable result might have ensued.

Nephrotomy in Renal Congestion.—DR. H. REYNÈS.—The question of surgical intervention for medical forms of nephritis is in its veriest infancy and does not admit of any conclusion; the case is different with inflammatory nephrites, acute or chronic, which are non-suppurating, painful or hematuric; here nephrotomy gives good results, suppressing the congestion, pain and hemorrhage. He reports a case of a young woman who after a cystitis had an attack of hematuria, unilateral nephralgia and painful swelling of the left kidney, fever, anorexia, and emaciation. A lumbar nephrotomy was done. There was complete absence of pus, previously noted by cystoscopic examination, there was present a congestive nephritis only. The result was excellent; the fever, swelling, pain and hemorrhage subsided and patient progressively gained in health.

DR. LOUMEAU reported a case similar to the preceding. A woman, 46, with

a cystitis due to calculus, a thick fetid purulent urine, an enormous and painful right kidney. The calculus was removed by the vaginal route and a vesico-vaginal fistula left for free drainage of the bladder and secondarily of the right kidney, which was believed to have been infected by an ascending route. After a while the fistula was closed on demand of the patient. The kidney had continued large and painful, the urine always remained purulent. A lumbar nephrotomy was done, supposing that he had an enormous pyonephrosis to deal with, but the kidney showed only a considerable amount of congestion but no trace of suppuration. He sutured the kidney immediately with catgut and the wound healed by primary union and the patient made a good recovery from an operation which he had believed at first only revealed an error in diagnosis; but it also led to a progressive diminution of the size and the pain.

DR. POUSSON related a case seen by him in consultation 4 or 5 years previously, which appeared to have a large suppurating kidney. Operation showed only an enormous congestion of the kidney with a small abscess in the superior portion. The patient recovered and is still in excellent health.

Facts of this nature prove that our field of study has been extended, thanks to surgery of the kidney. We had already our cases of kidney which were clearly surgical, we are adding to these certain cases of kidney formerly called medical. Albuminuria, the mechanism of which we are entirely ignorant, is far from being a contraindication to intervention. Indeed, the contrary is true, and he thinks that which was stated by Verneuil 20 years ago, apropos of awakening of diatheses by operative traumatism was an error of interpretation.

Case of Paraneuritic Cyst.—DR. VIGNARD reported such a case. A man 36 years old without antecedent urinary symptoms. The tumor developed rapidly and filled one-third of the abdomen. It was found attached to the anterior surface and convex border of the kidney, which had a normal appearance. The wall of the cyst was extremely thin and of a uniform smoothness. It contained a serous fluid which was analyzed by Professor Andouard and found to contain 1.67 grammes to the litre of urea.

Owing to the exhaustion of the patient intervention was limited to incision and drainage. Rapid recovery followed in 20 days without fistula, and there has been no recurrence in a year and a half.

The author claims that there is a scarcity of reports of similar cases.

Voluminous Hematonephrosis. Cryoscopy.—DR. F. LEGUEU reported a case in which by a transperitoneal nephrectomy he had removed a large cystic tumor of the left kidney.

The patient was a man 38 years old, who was sent to his service in the *Hôtel Dieu* with a tumor in the flank, with a diagnosis of abscess of the spleen. For several weeks the patient had presented signs of pleurisy, which had brought him to the hospital. Puncture in the seventh intercostal space was made and a cloudy, sanguinolent fluid withdrawn.

He found on examination an immense tumor occupying the entire left side of the abdominal cavity, tense, extending high up under the ribs and into the lumbar region. The insidiousness of the tumor, the nature of the fluid obtained made him believe that it had to do with a cyst of the spleen and he made an abdominal median incision.

He came upon a retro-peritoneal tumor from which he withdrew two and a half litres of a brown colored, sanious fluid. He was able to make complete re-

removal of the pocket without applying a single ligature and without finding a pedicle.

The patient recovered.

A histological examination revealed in the thin pocket flattened tubules and altered glomeruli though recognizable, with minute interstitial hemorrhages into the wall.

It was then a hematonephrosis of the left kidney, probably very old, of which he had not recognized the nature, even at the time of operation because of the atrophy of the renal vessels and absence of the ureter, probably obliterated, which had completely escaped him.

With Hallion he had made a cryoscopic examination of the fluid with the following result: The freezing point called was 0.55, consequently about equal to that of blood serum, and lower than that of the urine which varies between 1.30 and 2. Therefore the renal epithelium much altered acts like an inert membrane, at least admitting that the tension primitively elevated, had diminished by resorption.

He believes that from a study of the point of congelation of the fluid of a hydronephrosis we can draw a conclusion, prognostic or diagnostic. Prognostic: Where the Δ of the fluid is above 1 we may conclude that the renal epithelium is but little changed.

Diagnostic: Because in the presence of an abdominal tumor of which the fluid withdrawn by puncture and examined presents a higher than .55 the chances are in favor of a hydronephrosis, because other pathological fluids examined thus far have only varied slightly from the point of view of their osmotic tension, from that of blood serum.

Tuberculosis and Hydronephrosis.—Dr. F. LEGUEU reported a case in which he had performed a nephrectomy for a hydronephrosis due to a narrow stricture of the upper end of the ureter which was attended by a movable condition of the kidney, which after removal was also found to be studded with miliary abscesses, together with 3 large tuberculous cavities, characteristic bacilli and giant cells were found present. He claims that the association of tuberculous lesions and a stricture of the ureter is very rare.

Dr. ALBARRAN recalled a case he had recently presented before the Society of Surgery, of a tuberculous kidney associated with a hydronephrosis. In this case small calculi obstructed the lumen of the ureter. Cases of this nature are sufficiently rare. This case was not a tuberculous hydronephrosis but a simple coexistence of a hydronephrosis with a tuberculous kidney.

Case of Ulcerative Lesion of the Urethra.—Dr. RIEDINGER.—The report was that of a patient who, affected with stricture of the urethra, presented the symptoms of grave infection due to urinary infiltration; this, very voluminous, was incised, but the symptoms of infection persisted and the patient died. On autopsy an ulcerative lesion of the urethra was found, the urethra being obliterated by a collection of pus. Beneath this was a narrow conduit which led to a pocket beneath the mucous membrane parallel with the urethra; there could be no question of a cyst as the walls had no epithelium, but the author believed it due to simple ulceration due to gradual necrosis of the subjacent tissue.

Delirium Due to Renal Tuberculosis.—DRS. LOUMEAU and RÉGIS reported the case of a young woman committed to an insane hospital for cerebral trouble which was recognized as autotoxic. Examination led to an operation for

white potato, lobulated, moderately hard, soft in certain parts, not tender to touch. No glandular enlargements. The cord was not enlarged. Orchidectomy.

Dr. W. F. Whitney's report after examination of the tumor: A greatly enlarged testicle, measuring 8 cms. longest axis, somewhat lobulated. The body of the testis was replaced by a soft greenish medullary tissue. Microscopical examination finds that in places tubules can be seen with proliferating epithelium and these can be traced

Case VIII. Cartilage tissue seen. Glandular tissue lined with cylindrical Epithelium tissue between Glandular elements, fibrous and in many places associated with growth of striped muscular fibre and Epithelial cell masses which might be regarded as cancerous. Teratoma.

into the new growth, where in places the cells have a slightly tubular arrangement; in other places the cells are in solid masses separated by fibrous septa.—*Diagnosis, Adeno-carcinoma.* See illustration, Case 6.

Two years after the removal of this adeno-carcinoma of the testicle the man is well—in good health.

Case VII.—S. 92-3. J. E. H., adult, M. G. H. Records, Vol. XXXII., p. 144, February, 1899.

Nine months ago, after a blow, testis was painful and enlarged gradually until it was the size of an orange. The surface was smooth.

The swelling was hard; the cord was normal. He lost ten or fifteen pounds in weight. Orchidectomy.

Dr. W. F. Whitney's report: The testicle is enlarged to twice its natural size and is quite smooth upon the surface. On section it was found to be quite largely occupied by a new growth, which was exclusively necrotic in the central parts, but about the periphery was grayish, rather translucent, and with small cysts through it. Microscopical examination showed the remains of tubules surrounded by a large-celled tissue in places having distinct star and spindle-shaped cells. Here and there the tubules were cystic and dilated. *Diagnosis—Cystosarcoma.* See illustration, Case 7.

One year and three months after operation the man died. New growths were found in the spleen and liver, as well as all over the body.

Case VIII.—S. 959-2. J. H. G., fifty-one years old, M. G. H. Records, Vol. 351, p. 140, October, 1899.

No tubercular, syphilitic or traumatic history. One year ago a swelling began of the left testis. This swelling increased gradually and was associated with a dragging feeling in that side of the scrotum. The testicle was the size of a cocoanut, tense, non-translucent. Orchidectomy.

Dr. W. F. Whitney's report was as follows: A tumor, the general shape of the testicle, 18x12 cms. and weighing 1220 grames. The outline is slightly lobulated. On section, it is of an opaque yellow aspect with small translucent areas throughout, especially in the periphery. Microscopical examination showed glandular tissue of a tubular character, fibrous tissue, cartilage and embryonic muscular fibres. In places there were small cysts. *Diagnosis: Teratoma.* See illustration, Case 8.

Six months after the removal of this teratoma of the testicle the patient died.

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the psoriatic lesions had become the sites of syphilitic lesions. He had observed the same thing in other psoriatic patients that also had syphilis, *i.e.*, a special tendency in the patches of psoriasis to become affected with syphilitic infiltration. Others have also noted that tendency.

DR. S. LUSTGARTEN thought that a number of psoriatic lesions presented the character of the syphilitic lesions—in other words, that symbiosis was present.

DR. G. H. FOX said that, to his mind, there were some undoubted psoriatic lesions and some undoubted syphilitic lesions, and inasmuch as squamous syphilides look very much like psoriasis there were some lesions in which it would be impossible to say which disease it was.

DR. BULKLEY said that he had exhibited the case as a seborrheic eczema. The lesions were not at all characteristic of psoriasis, being more inflamed and crusted as in diffuse seborrhea. He had been first shown this by Unna, and he believed a good deal of the eruption would disappear under resorcin, a thing which psoriasis would not do. There was almost nothing of the original eruption on the elbows or flexor surfaces.

DR. KINGSBURY said that the squamous lesions he would look upon as seborrheic eczema if he had seen them apart from the specific lesions.

A Case of Dermatitis Following Use of a Hair Dye.—Presented by DR. BULKLEY for DR. KINGSBURY.

The patient was a woman who had used a hair dye for about one year. The dermatitis of the face and scalp developed about two months ago.

DR. S. SHERWELL said that he was not convinced that the dermatitis in this case had resulted from the use of the hair dye. It was hardly probable that the hair dye would give rise to such a lasting eruption.

DR. P. A. MORROW said that there was a hair dye containing hydrochlorate of paraphenylene diamin which gave rise to intense dermatitis, sometimes persisting for six or eight weeks after the application. In a case of this kind that he had seen the eruption was not limited to the scalp, but was situated upon the anterior portion of the chest and the back of the neck. Where the hair dye had been applied there was a vesico-pustular eruption with crusts. On the cheek it was very like an erythematous eczema, only less diffuse and more patchy. He knew of no other agent which, when applied to the skin, produced such a persistent dermatitis.

DR. LUSTGARTEN said that he had seen a number of similar cases, one produced by a proprietary preparation. All of them had persisted for a considerable time.

DR. G. T. ELLIOT said that he had seen a number of such cases, and in his experience they were quite common. He was inclined to believe that the chief mischief was from the mordant used rather than from the dye itself.

DR. BULKLEY said that the fact that the dermatitis did not develop until after the dye had been used for some months was no argument against its having been the cause of the dermatitis.

DR. MORROW said that there might be absorption of the poisonous dye by the hair shaft, and there might, therefore, be some continuous absorption. In the particular case under his observation there was very little improvement until he had had the patient's mustache and hair cut close.

Case of Pemphigus.—Presented by DR. MORROW.

The patient was a woman aged 50, of good family history. She had been vaccinated February 15th.

The present eruption began to appear about March 1, in the form of bullæ, which, according to the patient's statement, "popped up from the skin like green grapes." When she came under my observation, March 17th, the eruption was especially marked on the dorsum and palms of hands, on forearms extending above the elbows mid-way to the shoulder, on abdomen around the vulva and inner side of thighs, and nape of the neck extending down between shoulders, also upon the uvula and roof of the mouth. The lesions were about the size of a marrow fat pea or larger—some on the inner side of the thighs were the size of a pigeon's egg—they were filled with a straw-colored fluid and thickly clustered, almost confluent, especially upon the forearms. They seemed to spring up from the sound skin, without antecedent inflammatory change. After the collapse of some of the larger bullæ there was in some places a tendency to the formation of smaller bullæ around the central lesion suggesting erythema iris in their concentric arrangement. The eruption came out in successive crops and was extremely pruriginous. The patient complained of headache, inappetence and general malaise, also from inability to sleep.

DR. LUSTGARTEN said that the eruption was of short duration and presented the symptoms of herpes iris rather than of pemphigus. He would especially call attention to the erythematous lesions in the palms.

DR. FOX said that the fact that the bullæ sprung directly from the healthy skin would exclude herpes iris.

DR. C. T. DADE thought the case was one of multiform erythema, and that the lesions on the wrist were very typical of herpes iris.

DR. BULKLEY said that there was certainly a good deal of erythema around the lesions, and hence the diagnosis of herpes iris was quite possibly correct.

DR. FORDYCE said he had had in the City Hospital recently a case of pemphigus in which after the lesions had disappeared the patient had developed a multiple neuritis. This had occurred several weeks after stopping the use of rather large doses of arsenic.

DR. MORROW said that at first he had thought the case might be one of bullous erythema, but after watching the mode of development of the lesions he found that it did not at all correspond with the evolution of multiform erythema. There was no preceding erythematous or papular stage; as the patient had well expressed it, "they sprung up like green grapes." The lesions were very large, and there had been absolutely no suggestion of herpes iris until the breaking down of the bullæ. On the round spots marking the bases of the bullæ a number of smaller lesions had sprung up, and these certainly suggested erythema iris, although he could not conceive of that affection developing in such a manner.

Syphilitic Alopecia Resembling Alopecia Areata.—Presented by Dr. P. A. MORROW.

The patient was a young married woman, æt. 22, presenting a peculiar form of syphilitic alopecia resembling alopecia areata. The patches were round, or oval, and entirely smooth and quite characteristic of alopecia areata. She had been under observation several months and gave no sign of syphilis with the exception of a pigmentary syphilide of the neck. No history of syphilitic infection was obtainable from the patient or her husband, except possibly the occurrence of a lesion upon the ungual border of the left ring finger. This she stated existed several months, and was attended with enlarged glands above the elbow and in axilla of left side, but at present there were ulcerative lesions of the tonsils which were almost certainly specific.

DR. FORDYCE said that the pigmented lesions on the back of the neck were highly characteristic.

DR. BULKLEY also thought the alopecia was quite characteristic, and should not be confounded with alopecia areata.

DR. ELLIOT said that every one of the spots was atrophic and separated by normal skin from the other lesions. The pigmented syphilide on the neck and the gumma in the throat were additional evidence of the correctness of the diagnosis.

DR. DADE accepted the diagnosis.

DR. FOX said that there could be no doubt about the patient having had syphilis, but he doubted if the alopecia was due to syphilis because he had seen the same condition very often in persons who had not had syphilis. He hoped the case would be presented in the near future so as to settle this point.

DR. LUSTGARTEN said that the picture presented was that of syphilitic alopecia in connection with a pronounced leukoderma. He was inclined to look upon it as syphilitic.

A Case for Diagnosis.—Presented by DR. L. DUNCAN BULKLEY.

The patient was a boy of six years, who last August developed a small infiltrated spot on the centre of the lip. This gradually enlarged and was associated with infiltration. The tentative diagnosis that he had made was scrofulous or tuberculous eczema. The father had died of acute tuberculosis.

DR. H. H. WHITEHOUSE said that the appearance of the case was like that of lupus vulgaris.

DR. GEORGE THOMAS JACKSON said that the boy had been sent to him last fall, in consultation, and at that time it resembled a large gummatous syphilide. Antisyphilitic treatment was employed without benefit. The child had some illness, for which he was admitted to the hospital where under simple boric acid dressing the improvement was very marked. At the present time it certainly appeared to be a tubercular affection.

DR. LUSTGARTEN considered the case to be one of lupus vulgaris.

DR. FORDYCE said that he saw the case last November, and suggested the diagnosis of tuberculosis, though at the time it resembled a gumma.

DR. BULKLEY suggested that a distinction should be made between tuberculosis cutis and lupus. He would consider the case one of localized tuberculosis upon an eczematous basis.

A Case of Psoriasis Treated by the X-Ray.—Presented by DR. C. W. ALLEN.

The patient was a young man, first seen by him on February 14. The eruption involved the entire body. He had applied the X-rays to the back only, using chrysarobin over the whole body. Distinct improvement was evident over the area subjected to the X-rays, when compared with the other regions not thus treated.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

*Wednesday Evening, March 19, 1902.*JOHN VAN DER POEL, M.D., *Chairman.*

PRESENTATION OF CASES AND SPECIMENS.

A Case of Possible Infection of Syphilis from an Instrument in the Person of a Physician.—DR. FREDERICK GRIFFITH.

The history of a case of possible innocent infection of syphilis in the person of a physician at present under my observation is of importance as an instance illustrating the precaution necessary in handling syphilitics.

H. is a physician who had the subject of the following record under treatment:

A., a male, aged eighteen years. A shirt-maker by occupation observed a sore on his frenum after intercourse which had taken place upon two separate occasions four and six weeks previously. Induration was present, later developed glandular enlargement in both groins, in the post cervical chains and in the epitrochlears.

Alopecia occurred but there was no pathognomonic eruption. Chronic sore throat came on with bilateral enlargement of the associated lymphatics about one month after the appearance of the initial lesion. Small mucous patches appeared subsequently upon the tip and under side of the tongue and at the bottom of the sulcus between the lower jaw and lip. A gradual enlargement of both tonsils occurred at his time.

With the appearance of the secondary lesions antisyphilitic treatment in the form of the protiodide of mercury, grain one quarter three times a day; increased to half a grain; reduced and continued in doses of one-quarter grain four times daily was instituted, and save for the tonsils which remained of constant size, general bodily improvement took place.

Swallowing and breathing being interfered with, double tonsillectomy was performed four months after the throat symptoms appeared.

With the performance of the operation begins the interest in the personal history of the physician.

The instrument used was new and of Mathieu's spear pattern.

No pain was felt by the patient and but moderate hemorrhage ensued.

A moment after the patient had departed, H. took up the instrument to wipe it off previous to sterilization and in so doing pricked himself upon the ball of his left hand with the blood-stained spear of the instrument.

By means of squeezing, the application of a ligature and sucking comparatively free hemorrhage was produced from the pinpoint puncture.

No pain was felt at the time of the accident or subsequently. Seeing the wound an hour after the accident it presented to view a small punctured orifice and I simply advised watching. The wound healed entirely within a week and at the time I next saw it, by close examination a small pearly white scar was

apparent surrounded by a ring of epidermis which could be peeled off similar to a small ruptured vesicle.

Accepting that patient A.A. was suffering from syphilis, H., apparently should have demonstrated the innocuability of syphilized blood, the spearpoint being bloodstained according to the positive declaration of H.

It is now four months since the occurrence took place and no signs of syphilis have appeared in my professional patient.

Why he did not develop a primary chancre placing little value upon his measures of treatment at the time, is a difficult question to solve unless as has been put forth by some authors "that syphilitic poison introduced into a vein or a lymphatic vessel might give rise to constitutional syphilis instead of a chancre as a primary lesion."

It becomes a very fine point in the pathology of infection of an individual by syphilitic virus to determine just how the poison is absorbed; that it does not remain localized during the period of chancre formation is attested by the results of a number of surgeons who have performed excision of this lesion without securing immunity from secondary symptoms. Whether the next capillary pulsation succeeding the introduction of the virus or syphilitic germ if such be the cause of this dread disease, to an abraded surface, carries the poison into the general circulation to become elaborated during the period of incubation or whether absorption takes place more slowly through opened lymph-spaces, we cannot tell.

Sufficient time having elapsed for the appearance of a primary or secondary lesions in Dr. H.'s case I am led to believe that his efforts in his own behalf at the time of the accident were successful in throwing off the poison and that he has demonstrated that there must be an appreciable interval of time after the introduction before the absorption of syphilitic virus takes place.

With this deduction this report can have no better close than with a caution.

Careful handling for their own personal protection of syphilitic patients by their medical advisers cannot be too often advocated. Instruments should be instantly boiled after use upon this class of patients.

Local treatment of mucous patches had best be made by employing wooden sticks as cotton applicators and tongue depressors; both are cheap and can be destroyed by burning.

DISCUSSION.

DR. OTIS.—I would say in regard to these cases, I have on two occasions—one in a circumcision which I was performing myself for a concealed chancre under the prepuce, pierced my finger with the needle which was being used at the time, and some years later I put my hand on a knife with which another surgeon had just cut a hard chancre from the prepuce. It was the time at which we were removing the initial lesion considerably, and on the first occasion there was nothing done except to squeeze it out and suck it and use a strong solution of carbolic acid. The second time I immediately put nitric acid into the wound with a knife about $\frac{1}{4}$ of an inch. It was followed by no symptoms in either case.

DR. JOHNSON.—I have cut myself at least a few times when operating on syphilitics—once when doing a perineal section on a syphilitic individual who had an active eruption at the time I cut my finger—it happened to be my right finger—at any rate it was the finger I subsequently passed into the perineal wound, and I do not remember I took any special precautions except to disinfect it as

one ordinarily would do. On two other occasions I have pricked my finger quite deeply with needles while examining or operating on syphilitic individuals, without any subsequent effect. I am rather inclined to believe, as has been claimed by many writers, that the blood of a syphilitic will not give contagion.

Prostatic Cooler (Psychophor). —DR. VAN DER POEL.—This is a modification of one invented by Dr. Levine of Berlin. The advantages of it are first, that if found necessary it can be applied by the patient himself, and second, it can be applied, and is employed in a sitting posture, the patient's perineum resting upon the flat portion which reaches over the edge of the chair where the attachments of rubber tubing for the flowing in and out of the water are made, and

from where they can be controlled by the patient. The convex portion fits over the convexity of the prostate. The great advantage of it is, that it can be applied with the patient in the sitting position instead of compelling him to lie down, in which there is always more or less difficulty in keeping the tube against the prostate without holding it there. This one, once put in position with the patient sitting upon it, can be kept there.

Prostatic Douche Tube. —DR. RAMON GUIERAS.—This is a tube which has a single, not double current, and a simple wire at the end. It may be very old—whether this is so I do not know. I found the tube in a store about three years ago and had the wire put on the end—simply the inflow. It goes down in the prostatic urethra, irrigates the prostatic urethra, the anterior urethra and the bladder. By pressing it you may force the water along the sides of the tube into the anterior urethra or the posterior urethra and it will probably reach the bladder, or you can push it into the bladder, and after filling it allow it to escape again.

An Elongation for the Finger for Prostatic Massage and Stripping of the Seminal Vesicle, devised by a Physician of Louisville. —DR. VALENTINE.—At the first glance it struck me that the instrument was the most desirable one of those which had been offered for the purpose of increasing the length of the finger. I, however, was doomed to disappointment. I found that in attempting massage or stripping of the seminal vesicle that the instrument doubled upon

itself and I got no extension whatever. The fault in my result may be that I had not read the author's technique; in fact, he has not published it yet. Perhaps I am doing an unfair thing in anticipating him in issuing it.

CASE OF MULBERRY CALCULUS.

DISCUSSION.

Dr. Van der Poel.

The specimen I have to show is a particularly fine example of mulberry calculus, from which, one of the radiographs shown at the last meeting, was taken. As I remarked then, there was nothing of note either in the symptoms or history of the patient excepting that he gave a marked alcoholic history, preceding the period when the symptoms were first noticed. The diagnosis of oxalate of lime was made from its cystoscopic appearance, but the section as shown, proves it to be mostly composed of uric acid, with an oxalate of lime nucleus and circumference. The weight, 58.5 grammes. Although considerable strangury and pain were present, there was but little cystitis, and the removal was by the suprapubic method, with drainage through the urethra. The bladder wound was entirely closed as was also the skin and other tissues, excepting a small portion at the lower angle. The sutures were removed on the fourth day and the catheter on the seventh, at which time the patient would have been up and about, had it not been for a hypostatic pneumonia which developed from a bronchitis immediately after the operation. As presented to-day, the fourteenth day, the wound is entirely closed, and solid.

DR. OTIS.—I was very much pleased to be present at the operation and I am very glad to hear that the patient has made such a good recovery.

DR. JOHNSON.—I would like to say I regard it as a very beautiful specimen and rather regret that Dr. Van der Poel did not bring the radiograph of that shown, which I was fortunate enough to see the other day, and which illustrates quite well one or two things I shall speak of in my paper. You will see in the radiograph the different structures, the substance of which the calculus is composed is very clearly shown, and one is more easily penetrable than the other. The little spaces I think are filled with uric acid, if I am not mistaken.

The Diagnosis of Renal Calculus.—DR. A. B. JOHNSON read a paper with this title.

He spoke of the very great difficulties of establishing a positive diagnosis in these cases by ordinary methods of examination. The symptoms were often anything but typical in many instances and it was rare that a stone could be palpated through the abdominal wall.

A number of other conditions might produce precisely the same subjective symptoms and the same changes in the urine, including renal hematuria of all varieties.

After describing briefly the signs and symptoms produced by calculi and the changes produced in the kidney and ureter by their presence, together with the various methods of examination in ordinary use, the X-ray diagnosis of renal calculus was discussed at some length.

The difficulties and limitations of the method were described. These depended chiefly upon the somewhat erratic behavior of X-ray tubes and upon the

fact that with the best apparatus it was very hard to obtain pictures of stout persons of such quality that the presence of stone could be excluded.

In the case of pure uric acid stones the reader said that the shadows were faint and he thought it doubtful if such stones could be demonstrated in fat people unless the stones were of some size.

Fortunately pure uric acid stones were not very common and a very small admixture of calcium oxalate rendered the shadows cast by such stones much sharper and denser.

The reader said he had examined some 126 cases. Stone had been demonstrated in 26 cases. Once in an early effort he had said a stone was present whereas none was found. Once stones had been passed per urethram although not shown in the picture.

He had, however, succeeded in showing some very small stones of mixed uric acid and oxalate even in stout persons.

The smallest stone of this kind he had been able to demonstrate weighed a little more than half a grain.

Several prints were shown illustrating some of the difficulties of the technique and others showing the varying results by the use of tubes of different vacua and different times, in like and unlike stones.

A point was also shown demonstrating the degrees of permeability of various types of calculi, and several negatives were shown in which the presence of renal calculus was easily seen. Their diagnosis had been verified by operation.

DISCUSSION.

DR. F. TILDEN BROWN.—Mr. President: I have been very much interested in this valuable contribution to an interesting subject given us by the reader of the paper. I have very little to say. I can refer to one or two cases which have been instructive to me. I do feel, however, despite the amount of disparagement the writer of the paper maintains, from certain European quarters and from certain sections in this country, I do feel that there is no such valuable agent for the detection, for the clearing up of the diagnosis of stone, as by means of the X-rays, and what I have seen of Dr. Johnson's work in connection with some cases of my own, besides the plates he has shown me of other cases, has led me to feel very confident that I would be apt to get a quite positive diagnosis from Dr. Johnson's method of examination provided the patient were willing to undergo the repeated examinations at several intervals in case uric acid stones of small size were the offending substance.

I might make allusion to one case which Dr. Johnson and I have seen together and whereas we neither of us have anything positive to say about the case, I think it would be interesting to this section, though it was mortifying to me to think that a suspicion of the probable state of things had never occurred to me. A gentleman of some sixty odd years of age, heavily built man, was referred to me as having prostatic trouble. I examined his prostate. He complained of exquisite sensitiveness over one point on the right lobe—and I want to say that the prostate was uniformly larger than normal for a person of his age. He was exquisitely tender at a point over the right lobe of the prostate. Compression of this resulted in nothing more than the outpouring of a great many corpora amylacea, and he said he was relieved. Some such process as that was gone through with at intervals of four or five months and the patient returned in better spirits and health; but he complained bitterly as ever of annoying sensations

referred to the perineum, inability to sit down without pain in the ischia, inability to take any exercise, and a sensation as if some small bug were traveling in the deep portion of his urethra or the neck of his bladder or prostate. He felt quite certain there was a concretion in his prostate and he was unable to understand why he could press so firmly on his prostate without hurting himself very much and could never sit down, even on a soft sofa or chair, without discomfort, unless he had his pillow with him, and even then it was always attended with discomfort. He asked whether an X-ray picture would show if he had anything in the prostate or in the ejaculatory ducts. I told him I didn't know. I thought not. I did not know what shadow would be cast by such concretions but rather inferred that they would be very trifling. He wanted to try, and I introduced him to Dr. Johnson, who took a picture which showed a small concretion, presumably in the lower part, perhaps lodged an inch or an inch and a half of the right ureter and another small concretion perhaps $2\frac{1}{2}$ or 3 inches up in the left ureter. Dr. Johnson naturally wanted to verify this and there was opportunity of doing so some three weeks later, when he got exactly the same effect. In that case it had never occurred to me that the patient was suffering from a possible calculus in the ureter.

Another case of interest which Dr. Johnson cleared up for me was in the case of a young woman I showed before this society some four years ago I think, where the kidney had been removed in conjunction with a pyelo nephritis and subsequent hemorrhage from the ureter, and in the first place I had detected the occlusion of the ureter by the uteral catheter at a point 3 inches from the ureter mouth. I tried to dislodge, to move this calculus or pull it down, without success. It remained in place and nephrotomy was done to drain the kidney. Subsequently more bleeding came on and it was a question as to the cause of the bleeding, and whether nephrectomy was necessary; and the patient making a good recovery it seemed to me to be a matter of interest after about three years intervened to know whether that calculus was still in place. It was shown to be perfectly, just where it had been felt by digital examination in the peritoneal cavity and by measurement with the catheter in the ureter.

The only case to which I shall refer in one—I don't know whether Dr. Johnson knows anything about it. I don't know all the details of it, but it was a patient who was sent to me—the man was about fifty, who was supposed from his clinical manifestations to have right renal calculus. I think the fact of a negative report from some radiographs taken in one of the prominent hospitals in this city was the reason the patient was sent to me to be examined. The evidence showed that the right ureter was abnormal to a slight degree and in connection with the clinical manifestations it fairly suggested renal calculus. The kidney was opened and the calculus was found. I do not know what the nature of the calculus was.

DR. OTIS.—Mr. President: I would like to say in regard to the diagnosis of kidney stone that I consider that the X-ray is without any doubt whatsoever the most valuable aid that we have in locating stone in the kidney, and it not only demonstrates the presence of stone positively, but also demonstrates in what portion of the upper urinary tract it is situated. In order, however, that it should be of value the apparatus should be of the very highest quality and the operator should be an experienced radiographer. Where the diagnosis is positively established, where the presence of a shadow has been confirmed by a second radiograph, the diagnosis is practically a positive thing. In thin patients, of course, it is much easier than in stout ones. We must also take into consideration the

fact that a diagnosis of renal calculus by any other method is exceedingly dubious. I suppose pain is the most common diagnostic symptom in stone, and owing to the reflexes in this region it is one of the most unreliable signs that we could have. You see patients with kidney stones which give nothing but bladder symptoms, or symptoms which Dr. Brown spoke of. Pain is one symptom. I think that the use of the radiograph by a man of experience and with the best apparatus—a man who understands the difficulties to overcome and the way best to do so, is the most valuable aid that we have in the diagnosis of kidney stone.

DR. BIERHOFF.—I regret very much I had not the pleasure of listening to the entire paper because I am satisfied it would have been fully as interesting and valuable as the part I had the pleasure of hearing.

I agree with the writer of the paper, as well as with the preceding speakers, in their views that the radiograph is one of the most valuable aids that we have at present for the diagnosis of calculus, either in the kidney or ureter. I cannot admit, however, that the radiograph is always positive in its results or that we can always rely upon it. I can recall one case, which is known also to our Chairman, in which the X-ray in the hands of one of the most expert operators in this city, with possibly one of the most complete and perfect machines in the city, on two occasions in the examination of the same subject left us with a negative diagnosis. Further examination by another method led us to make the diagnosis of renal calculus. The operation showed several large renal calculi.

DR. ERDMANN.—I should like to ask if the radiograph apparently increases the size of the stone or not. The reason I ask the question is because I saw that case operated upon of which you showed the plate yesterday and the stone did not appear anywhere near as large.

DR. JOHNSON.—It does.

DR. VAN DER POEL.—About how much is the increase?

DR. JOHNSON.—That is a very difficult question to answer. It depends upon so many things. In the first place one thing I have noticed, that in some pictures the shadow of the stone is elongated vertically; that kidney moved a little bit. I noticed that very markedly in the picture I took yesterday and again in a picture I took about two weeks ago. The shadow of the stone was much greater apparently everywhere than was the real stone. Another difficulty is that it makes the stone appear larger but not to the same degree in every case is that everybody's kidney is not just the same distance from his skin, and, of course, the further the kidney is away from the skin the deeper it lies from the body, the more its shadow is increased, and, of course, the difference in the distance of the tube makes a difference. If the tube were always the same distance it would, of course, exaggerate the stone that was always at the same distance from the body an equal amount; but everybody doesn't put the tube the same distance.

DR. VAN DER POEL.—I asked that question because two radiographs I showed at last meeting of vesical calculus were but a slight enlargement of the stone. Of course, this rule that Dr. Johnson speaks of would not apply in that case.

DR. BROWN.—I should like to ask whether in estimating the probable position of stones in the ureter a landmark could be placed—a button in the rectum or something of that sort, just above the prostate, so as to get some indication of the relative position of ureter stones.

DR. JOHNSON.—That would be very simple.

DR. GRIFFITHS.—Dr. Johnson, in his statement of technique, regards a screen as no protection. I would like to ask the Dr. what he considers the cause of X-ray burning?

DR. JOHNSON.—I will have to answer as Lord Dundreary did, that is something no fellow can find out. I did not mean to say that the screen was no protection, but I did say—and it is generally believed—that it is not a perfect protection. It is probable that you are a little less likely to burn a person if you use a screen, but still burns have been produced although screens were used.

I do not know what the cause of X-ray burns is at all. It has been explained, as the gentleman who asks the question is probably aware, on a very large number of different hypotheses. One is that it is due to the static electricity generated in the skin; one that it is due to ozone generated in the skin; one that it is due to decomposition of the nitrogenous products in the skin and the formation of nitrates or nitrous acids or something of that sort, which produces gangrene of the skin; and there are some other explanations; but the main practical question is in what way to avoid burns. This, of course, hasn't much to do with the question of kidney stones. I have tried a number of things; tried screens made of gold leaf and produced a very good burn through the skin; paid \$25 for the screen but produced burns just as where I used no screens. I also tried anointing the skin with lanoline and bought several pounds of lanoline and anointed the skin and produced burns. One way to avoid burns is to keep the tube way off from the skin and limit the amount of exposure on any given occasion.

When you are going to take a picture of kidney stones that are going to show stones you have to use a far greater amount of energy than in taking ordinary radiographs. The reason why most people fail to get pictures which show kidney stones and the reason why they make a negative diagnosis is because the apparatus they use does not permit them to get any picture at all of the body. They make a negative diagnosis because the plate doesn't show anything. In order to penetrate the body of a stout man you have to use a large amount of energy and the more energy you use the more apt you are to produce a burn. That is the reason why great care must be taken.

Obituary.

Hofrath Professor Doctor Moritz Kaposi died in Vienna, March 6, 1902. He was born in Kaposvar, Hungary, Oct. 23, 1837. In 1856 he went to Vienna to study until 1861.

He was taken up by Hebra, who recognized his abilities, and in 1866 was made *Docent* in Dermatology. In 1875 he was made a Professor and represented Hebra for two years. In 1881 he received the full charge of the clinic.

From a condition of comparative poverty and obscurity, by his work and his attractive personality he rapidly gained distinction in his special field. His name is indissolubly linked with that of Hebra, and it is perhaps due to the work of these two men that dermatology to-day holds the high position in medical science which it does. Among the most prominent dermatologists of the world are those who have been pupils of these two men.

Kaposi had published over 150 articles, among his most important works are "Das Lehrbuch der Hautkrankheiten," which has passed through several editions, and translated into other languages, and "Pathologie und Therapie der Hautkrankheiten." Many of the forms of skin disease were first described and named by Kaposi.

Kaposi married the daughter of Hebra. One son is an assistant of Czerny.

Selections.

CUTANEOUS DISEASES.

Framboesia and Tinea Imbricata.—PROF. R. KOCH (*Arch. f. Derm. u. Syph.*, 49, 1902-3).

In his travels in the south of Africa and southern seas under a commission of the German Government to investigate malaria, the writer had an opportunity to examine many forms of skin diseases in the native people. He gives the following clinical description of the two disorders, as seen by himself:

(1) *Framboesia* is an infectious disease, which is transferred from one person to another. One attack endows the sufferer with immunity from further attacks. Children are the main victims of the disease, and they are intentionally exposed to the contagion in order to go through the disease quickly. The eruption is scattered in round patches, separate growths joining together, reaching various sizes from a pea to a quarter of a dollar. The eruption is always raised above the level of the skin, having the appearance of fungating granulations. The primary eruption looks very much like fresh variola pustules. The first appearance is of raised tubercles covered with epidermis which present marked pronounced concave apices. The largest tubercles are always deprived of their epidermis, secrete a purulent liquid and are covered with crusts. These disclose, after removal, a cushion-like granulating mass. In the same patient the whole development of the tubercles, all their transitory stages can be seen. The tubercles appear in various periods, always in decreasing number, till full immunity is reached, when their appearance ceases. This is reached in a period of time of from several months to a year. Usually children are affected only when the disease appears upon an island, the inhabitants of which have never suffered from it. Grown people also fall victims of the infection. Europeans according to the writer's statement never suffered from the disease, although they come in personal contact with the native people.

Tinea imbricata has often been seen by the writer. In small children the first appearance is on the breast, spreading in a circular form and then occupying entirely a large portion of the skin, not appearing in rings or circular patches as *tinea tonsurans*. A large number of inhabitants are affected. The disease does not influence the general condition of the patient. The affection never heals spontaneously.

The writer does not express a decisive opinion in regard to the question whether a chronic enlargement of the inguinal glands, noticed very often in the patients affected with *tinea*, is in relation to the disease.

Atypical Forms of Syphilis.—PROF. B. M. TAROWSKY (*Russian Journal of Cutaneous & Vener. Dis.*, Vol. I., p. 11, Jan., 1901).

This interesting article brings to our consideration a very vital point of hereditary syphilis. According to Profeta's law a syphilitic mother can with impunity nurse her own child, without infecting the child with syphilis. Up to the present time there are only twenty-five (25) cases published as exceptions of this law. Accepting, then, the foregoing law as a guide when we are considering the welfare of such children, the question presents itself, does such hereditarily acquired immunity of the fetus last the whole of its life or a certain time only? Cases are reported where the acquired immunity lasted only a short

period, the children becoming infected with syphilis later in life, and others in which the immunity was complete for life. This last fact gave great hope that through its action syphilis will gradually disappear owing to syphilization.

But the writer, basing his deduction upon material gathered during his forty years of observation of syphilitic patients, concludes that such immunity is a very rare occurrence, and that children born of syphilitic parents and having various dystrophic symptoms, lose their immunity very early, mostly at the time of sexual development, and are prone to acquire syphilis in the same manner as other healthy people.

This form of syphilis acquired by the second generation of syphilitic patients, who lose their hereditarily acquired immunity is the subject of this article. Tarwowsky calls the first generation of syphilitic patients, families where the husband, wife or both have acquired syphilis; second generation, persons whose parents had acquired syphilis. This category presents first grade of hereditary syphilis. And the syphilis acquired by these patients he calls syphilis binaria, as two factors play here a part, the toxins of syphilis and later the syphilitic virus itself. This form of syphilis, as compared with the form of the usual acquired syphilis, presents certain anomalies in its course. It may only limit itself to the primary manifestation of a hard sore with painless swollen glands. Under local treatment the hardness and glands disappear and no other manifestations of syphilis show themselves in the later period of life. This is the so-called abortive form of syphilis. The second form, *syphilis levis s. benigna*, has a mild course. The third form, *syphilis atypica proprie sic dictu* is entirely typical in its stages, presents anomalies in its course and may be mild and severe. There may be more forms of syphilis binaria, but the writer gives only here the account of cases and forms observed by him. A vast number of cases of syphilis binaria do not differ in any way from the course of usual mild syphilis. But in one thing even a syphilis binaria developing in the ordinary way differs from an ordinary acquired syphilis, namely, in its influence upon the progeny of the patient. The writer had the opportunity of watching three generations of patients afflicted with syphilis in twenty-five families. The first progeny of parents affected with syphilis binaria as compared with the first progeny of parents suffering with acquired syphilis, gives a double number of abortions, dead-born children and of children dying in the first years of their lives. Dystrophic symptoms occur in more severe forms in children of the first category than in children of the second.

In conclusion, the author lays special stress upon the fact, that the cases upon which he based his conclusions belong to well-to-do people, who did not neglect the disease, but underwent a prolonged specific treatment with mercury and iodid of potash.

**Changes of the Skin in Typhoid Fever (Typhus Abdominalis).—A. B. SIR-
BIRSKY** (*Russian Jour. of Cutan. & Ven. Dis.*, Vol. I., 1901, p. 1.)

In many cases of typhoid fever and typhus the palms and soles undergo a yellowish change in color. The whim of the writer was to explain the cause of this change, and to study the anatomico-pathological changes of the skin of those regions in typhoid fever.

The material was gathered from forty-two young patients who died of typhoid fever without complications, and from two who died of typhoid fever with nephritis.

Microscopical investigations lead him to accept the conclusion that a pig-

ment containing iron is deposited in the skin of typhoid patients partly in form of granules in the superficial layers of rete malpighii and partly in the form of a diffuse layer in the stratum corneum and in the deep layers of rete malpighii. This discoloration of the palms and soles is only met in thirty-four per cent. of cases of typhoid fever and is often seen in persons who died of other causes. During the attack of typhoid the elastic tissue of the skin and skin vessels is changed, a part of the elastic fibres is entirely gone, undergoing a granular disintegration, especially the elastic fibres of the skin vessels. These changes can be demonstrated in the third week of the disease and increase during the course of the disease.

Pityriasis Rubra (Hebra)—M. A. TSCHLENOV (*Russ. Jour. Skin and Venereal Diseases.*) Vol. II., page 3, 1901.

This contribution to the question of pityriasis rubra places the writer on the same level with the two epoch making works of Brocq and Jadassohn. From an exhaustive study of the question from Hebra's first description to the present time the author holds that pityriasis rubra is regarded differently by various medical schools, the French, American and Italian. The present tendency is to limit this group and simplify the nomenclature, recognizing pityriasis as a distinct disease, only enlarging at certain points the original clinical description of Hebra, and including many forms of erythrodermia exfoliativa of the French with drug eruptions. In England the term pityriasis rubra and dermatitis exfoliativa are used indiscriminately, only external symptoms of the disease being taken into account.

The writer's own opinion is that pityriasis rubra is a distinct disease, its features the same as those described primarily by Hebra, with some additions regarding its clinical picture and prognosis. He recognizes the existence of the acute form of exfoliative dermatitis of Wilson-Brocq, but questions the existence of its chronic form. As to erythema scarlatiniforme recidivans, it has nothing to do with pityriasis rubra. It is in many cases a drug eruption.

The writer reports three cases of his own, making forty-two cases in all. A detailed clinical description of one very interesting case is given, which during life had been regarded by some as a case of mycosis fungoides, owing to the superficial ulcers present upon the patient's chin. Careful observation and microscopical examination demonstrated that the ulcer presented a carcinomatous growth of the chin, and the autopsy revealed a carcinoma gelatinosum of the stomach with perforation.

Histologically, pityriasis rubra presents a primary affection of the epidermis with secondary inflammatory changes of the cutis, leading in the end to an atrophy of the skin. The etiology is unknown, the most acceptable hypothesis is a toxic origin of the disease. The prognosis is at present more favorable than in Hebra's time. A full and exhaustive literature is added to this thesis.

The Syphilitic Family and Its Progeny—PROF. B. M. TARNOWSKY (*The Russ. Jour. Cut. and Vener. Disease.* Vol. II., 1901, p. 717.)

The conclusions arrived at by the writer are based upon the study of the clinical material gathered by him during his forty-two years of practice in medicine, during which he has had the opportunity of personally watching three generations of thirty syphilitic families. Some of the thirty families he was able to follow down to the fourth, even fifth generation. All the families belonged to the better class of city inhabitants, and the first and second generations, that is the generation which had acquired syphilis and the generation

which had hereditary syphilis were treated with mercury and iodine. Of the thirty families, twenty-two belonged to the pure Slav race and four of mixed race; Slav and German and French. In the city family syphilis is usually introduced by the husband, who acquires the disease before marriage. The hereditary syphilis showed itself in three forms: in form of hereditary syphilis, of dystrophic changes, and in the form of hereditary immunity. Parents with acquired syphilis may transmit one of the three forms to their offspring (first generation). The hereditary effect of the acquired syphilis is expressed in the second generation of a syphilitic family by a large number of abortions, stillbirths, by children who either die in the first months after birth, or develop symptoms of hereditary syphilis or show anatomical and functional dystrophies. The hereditary acquired immunity of the second generation (Profeta's law) is with few exceptions only of short duration. The effects of hereditary syphilis upon the third generation are of a very mild character. Neither abortions nor stillbirths, nor dystrophic symptoms are as prevalent here as in the second generation. Acquired syphilis of the first generation is not transmitted to the third generation in any form known to us as characteristic of hereditary syphilis. But on the other hand neither is immunity to syphilis bestowed upon the third generation. A father and mother suffering during conception or pregnancy with visible symptoms of late heredity do not transmit to the child syphilis in hereditary form. The writer did not observe in his case the transmission of syphilis from the grandfathers to grandchildren, the parents being free from manifestations of the disease, and in his opinion this possibility can hardly be admitted. Syphilitic heredity of the second generation has only a dystrophic effect upon the third generation, and this dystrophic effect of syphilis, which is mostly expressed in the vital generic-procreative energy of the diseased organism, is in no way parallel to the mildness or severity of the symptoms seen in the first or second generations. The dystrophic changes of the second generation are not transmitted as similar dystrophic changes to the third generation. Hereditary syphilis in the third generation is only seen when the second generation, born from syphilitic parents, acquires extra-uterine syphilis (syphilis binaria of the writer). Syphilis binaria is seen in cities, but more often in villages (the writer has here in mind Russian villages and the mode of life of their inhabitants. Ref.). Also in cases, when members of a second generation of syphilis marry people who have acquired syphilis, the third generation may have symptoms of hereditary syphilis.

Syphilis binaria runs a different course from syphilis acquired by healthy persons. The writer considers three forms of this disease: *S. binaria abortiva*, *levis*, and *atypica*. Syphilis binaria has a more detrimental effect upon the third generation, than syphilis of the first generation upon the second. This detrimental effect is expressed by a quite large increase of abortions, stillbirths and deaths in the first years of life, by the appearance in the third generation of symptoms of hereditary syphilis coupled with dystrophies and by a large diminution of normal progeny. Anatomical and functional dystrophies of the second and third generations of syphilitics play an important rôle in the diminution of progeny in syphilitic families. Syphilis binaria is the main reason of the degeneration of a people, especially in endemic syphilis in villages and small places. The supposition that syphilis will lose its destroying character with syphilization of the people cannot be accepted at present. Syphilis is more dangerous for the life of a community than of an individual.

1. **A Little Known Symptom Which Often Accompanies Carcinoma in Human Beings.**—PROF. LESER (*Münch. Med. Woch.*, 48, 1902, 2035.)

2. **Relation of Angiomata to Carcinoma.**—GEBELE (*Münch. Med. Woch.*, 49, 1902, p. 139.)

In examining fifty cases of undoubted carcinomata of various organs Leser noticed in forty-nine cases the simultaneous presence of angiomata in various numbers upon the skin of the affected patients and considers himself entitled to conclude that angiomata are of common occurrence in carcinomatous patients. In order to decide the question whether angiomata are not seen in healthy, that is, in patients not suffering with carcinomata, three hundred such persons were examined with the result that in aged persons free from carcinoma, angiomata occur, although carcinomatous patients have angiomata at an earlier period. The occurrence of angiomata in young persons can be utilized as a diagnostic aid. These conclusions are questioned by Gebele, who examined 21 cases of undoubted carcinoma and two hundred of a number of other diseases. Only a little over half of the former presented angiomata and in the latter they occurred in 43 per cent. The writer regards the presence of angiomata as a sign of retrogressive change in the tissues, most marked in advanced age and of no value for purposes of diagnosis.

The So-called Profeta's Law.—L. GLUCK (*Wien. Med. Woch.*, 1902, p. 406.)

The writer questions the validity of Profeta's law, owing to the following case, which came under his observation. A mother 20 years old married one year came to the hospital with her eleven months' old baby. On her admission to the hospital the mother presented a macular eruption of the body, large condylomata of genital organs, breasts, anal region and mucous patches of the lips of the mouth, tongue and palate and a general polyadenitis. The first appearance of the present disease, hard sores on the nipples of the breasts, was noticed when she was in her fourth month of pregnancy with the present living child. The mother did not notice any skin eruption, but she positively affirms that sores on the genital organs were present before the birth of the child. The husband does not show any signs of syphilis.

On the day of admission the child did not present any signs of syphilis. The mother was not allowed to nurse the child further. Eight days after admission a hard papule appeared on the chin of the baby, which gradually developed into a hard chancre with hard submaxillary glands and in due time an early syphilitic eruption of the body and mucous papules of the mouth were seen by the writer. Thus a mother affected with recent syphilitic manifestations can infect her healthy baby—nursing in the first weeks of its life.

Herpes Zoster and Its Relation to Internal Inflammations and Diseases.—

Especially the Serous Membranes.—ROLAND G. CURTIN (*American Journal of Medical Sci.*, 123, 1902, p. 264.)

The writer reports ten cases of Herpes Zoster combined with various diseases as pleuritis, peritonitis, Bright's disease, appendicitis, esophageal cancer and raises the questions: (1) Whether the internal disease is not a Zoster of the serous membrane? (2) Whether the inflammation of the internal filaments of the nerve was communicated to the pleura and peritoneum. (3) Whether the internal inflammation caused the Zoster. (4) Whether both troubles were independent or coincident?

Roentgen Rays as Means for Diagnosis of Syphilis of the Bones.—A. T.

POSPELOW (*Russ. Jour. of Skin and Ven. Dis.*, Vol. III., 1902, 228.)

In many cases of late syphilis of the bones, especially where bones are affected which are covered with a thick muscular layer, as the thigh, where palpation is hardly sufficient to localize the disease, the rays are of great value in differentiating between muscular changes and affections of the bones. He cites five cases to the point, in some of which no correct diagnosis could be made without the use of the rays.

GENITO-URINARY DISEASES.**The Practical Application of the Combined Operations of Internal and External Urethrotomy.—By REGINALD HARRISON, F.R.C.S. (*Edinburgh Med. Journal*, January, 1902, p. 33.)**

Harrison calls attention to this procedure, which he thinks, does not appear to be sufficiently known. It has much to recommend it, both theoretically and practically.

Instances of acute and extensive extravasation of urine are not infrequently met with. The remote effects following extravasation and sloughing of the parts should be borne in mind. Subsequent plastic operations, undertaken for the removal of adhesions following the sloughing process, may be avoided if this contingency has been foreseen.

However clumsy and violent the process may appear, suppuration in connection with a stricture, and subsequent extravasation of urine and tissue destruction, is nature's way, short of a sudden rupture without warning, of getting rid of so dangerous a compound as urine may prove when it is pent up by a stricture or obstacle even within the limits of its natural barriers. This process is really a conservative one, though this may be a difficult thing to recognize. The case of a traveller is mentioned, who was the subject of an old traumatic stricture. While in the bush, hundreds of miles away from medical attendance, he was seized with retention, and went through the process of an acute and extensive extravasation, and subsequently the formation of several urinary fistulæ, absolutely unattended. He is still alive, and in good health, his life having been undoubtedly saved by what may very properly be called a series of catastrophies.

It is generally agreed that in the treatment of these cases, at least two main objects should be kept in view—first, to secure a free and direct escape for the entire contents of the bladder; secondly, to provide in a similar way for the urine that is extravasated and confined.

To attain these objects, the patient is anesthetized, and the internal urethrotomy is first performed. It is highly important that the second part of the operation be carried out on a grooved staff of ample dimensions. This end is best secured by the use of the Maisonneuve urethrotome, which is the preferable instrument for this purpose. The flexible guide is first passed, the director follows, and the knife being run along in its groove, makes the section of the stricture, thus completing the first part of the operation. It rarely happens that this cannot be accomplished, the bladder pressure being taken off the stricture by the extravasation that has occurred. A large median-grooved staff is now passed into the bladder, and an external urethrotomy is performed, the incision being large enough to permit the introduction of a full-sized perineal drainage tube; the opening of the tube should be made as near as possible to the junction of the membranous with the prostatic urethra, as in Cocks' operation. The drainage tube

should precisely fit the perineal wound. This permits no side leakage of blood or urine, and no burrowing of the latter through the interspaces made by the extravasated urine.

For some years, Harrison has used, for the second stage of perineal control drainage (with the object of getting the patient up and about as soon as possible), the rubber tubes with a tap, which were first brought to notice by Professor Annandale. They should fit the wound in each case, and are substituted for the rigid gum elastic ones, when the latter are removed at the expiration of three or four days after the operation, and when the risk of bleeding is unlikely.

Having secured a free and direct escape for the urine from the bladder, the next step is to deal with the area of extravasation. In the scrotum the incisions should as far as possible, be confined to one or more, made on either side of the median raphé, according to circumstances. This secures a freer vent for the extravasated urine than an incision along the middle line would give. The incisions should be ample in length and depth, extending well into the cellular tissue. Much of the confined urine in this situation may be squeezed out through the wounds, the surgeon using his hands as if he were dealing with a wet sponge. In this way the scrotum can be reduced rapidly to almost normal dimensions, and much sloughing averted. Similarly, the abdominal parietes may be dealt with, wherever urine appears to have been extravasated.

Incisions should not be made in inconvenient places. Perineal tubes should be retained from ten to fourteen days, and the urethra treated subsequently, as after perineal section for stricture, by the passage of full-sized "whips" or ordinary bougies, daily or every other day, until healing has occurred, and then at gradually lengthening intervals. The length of these whips (24 inches), their pliability, and shape, enable them to dilate a stricture, however narrow by a single introduction, so that there is no chance of losing the way in a difficult case when once found.

Their more general use has largely diminished the number of so-called impassable or "incurable" strictures. Recently the writer has had some of them made with a groove (channelled whips), which serve the purpose of catheter as well as dilator, and may, on an emergency, act as a guide to the urethra, as in dealing with a perineal abscess or performing a perineal section. A flexible bougie will sometimes pass where a metal staff fails.

The subsequent management of these cases needs no special comment.

Where the internal urethrotomy cannot be performed because the stricture is found to be impassable to instruments, relief must be afforded by endeavoring to reach the bladder by a perineal incision, as in Cock's operation. This is by no means easy, as the bladder is now usually empty, and the perineum enormously swollen. Still the difficulty is not insuperable, and the surgeon is justified in undertaking it. This recourse is seldom necessary as the chances of introducing an instrument into the bladder are greatly in favor of the operator, when the patient is anesthetized, and the urethra freed from tension by reason of the extravasation that has occurred. The remainder of the process is at once simplified, when the introduction of a gum elastic catheter, which is a necessity, has been accomplished. For want of this, extravasation has continued to death, the urine only partially escaping through the scrotal and other side openings which may have been made surgically or by nature, and which had become blocked with pus and sloughs. Post-mortem examination often showed that the latter openings had no connection with the

urethra or bladder. In this way the high temperature, chills, and a dry tongue were explained.

The combined urethrotomies probably represent the safest and most efficient means of treating some forms of urethral stricture unfitted for dilatation, as measured by immediate and remote results. The chief objections to internal urethrotomy arise from the fact that, by reason of the construction of the wound, the liability to rigors and urinary fever is considerable. In a few instances the fever has been sufficient to cause death, marked by more or less suppression of urine. The writer does not recall having ever seen either death or urinary suppression following an external urethrotomy with drainage.

Furthermore he repeats the statement made to the International Congress of Medicine (Paris, 1900), "that there is direct evidence to show that the tendency to recontraction and recurrence of stricture, after internal urethrotomy, is largely diminished by concurrent employment of systematic and efficient urine and wound drainage, such as its combination with external urethrotomy or perineal puncture affords."

A. L. W.

Chronic Urethritis and Its Treatment by Extract of Suprarenal Capsule.

—By G. L. EATON, M.D. (*Occidental Medical Times*, March, 1902.)

Eaton states that the anterior urethra is twice as often the seat of chronic inflammation as the posterior, in spite of the commonly supposed idea that chronic urethritis is usually associated with some process involving the posterior urethra. The chronic condition existing in the urethra between acute attacks is aggravated by astringent injections. Chronic engorgement of the infected glands and follicles results, and is followed by erosion of the neighboring mucous membrane. The orifices of the ducts and follicles are dilated, frequently giving off muco-pus.

In this variety of urethritis the author has found the extract of the suprarenal gland of marked therapeutic value. It acts not as an astringent, but as a direct stimulant to the muscular coats of the blood-vessels. Absorption of embryonic tissue is thus brought about, and improvement of the general tone takes place.

Three cases are reported in which chronic urethritis was cured by the use of a solution containing the extract. In one case of posterior urethritis local applications through the endoscopic tube of a 10-per-cent. solution daily, are said to have practically cured the disease after 15 days of this treatment.

It should be added that in the so-called anterior cases, *i. e.*, those in which the solution was injected with a small hand syringe, there was a slight dilatation and inflammation of the right vesicle and ejaculatory duct. Massage of the vesicles was performed in addition to the injection into the anterior urethra, with good results.

The extract has been used in acute gonorrhea, but it is not to be recommended. The author does not give any reasons for this statement.

A. L. W.

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A DISCUSSION OF THE OPERATIVE TREATMENT OF PROSTATIC HYPERTROPHY; WITH THE PRES- ENTATION OF SPECIMENS AND MODELS BEARING ON THE SUBJECT.

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cine; Consultant in Genito-Urinary Surgery to the City Hos-
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St. Mary's Infirmary, etc.

WHILE the surgery of the prostate has made wonderful strides of real progress within the past fifteen years; while the ingenuity and originality of members of our profession have been in the highest degree commendable, and have placed us, as well as humanity in general, in the position of owing them a debt of gratitude for their work in this line; while case after case of hypertrophied prostate is now operated upon with a large proportion of cures, and a still larger proportion of benefits as a result—it must still be admitted that there are numerous cases who are operated upon without either benefit or cure; and there are other cases who might be relieved by operation but are denied that advantage and are allowed to go through the balance of their miserable lives suffering from the various painful effects of that harassing malady; and still others are operated upon who do not need operation, who might be given an equal amount of benefit by less heroic and less radical methods of treatment. Moreover, if we look over the literature of this subject we find a well-marked tendency of operators to follow in a certain beaten

track, making use of some one operation only, that happens to suit their fancy or happens to be the product of their own planning.

This being the case, it can hardly be said that the profession stands in a position above criticism in these several respects; that it is either sufficiently unbiased to make an unprejudiced choice between the several operative methods in vogue, or has acquired sufficient ability to make the differential diagnosis of the case at hand that should determine the choice. It seems hardly possible that any one of the numerous measures could exactly fit the needs of all cases, varying, as the cases do, in respect to general and local conditions, age, vigor, character and form of growth, complications, etc.

To illustrate my position, I wish to call your attention to a few points in the histories of four cases with which I have been personally acquainted; and to submit for your inspection certain specimens and models of hypertrophied prostate bearing on the subject.

Case I.—A patient, aged 47 years, whom I saw in 1897, with my friend, Dr. H. M. Pierce, was a sufferer from a large number of the ills of prostatic obstruction. His debility was so great that the question of cancer, instead of hypertrophy, arose in my early investigation of the case. It was in the developmental period of Freudenberg's modification of the Bottini operation. I carried out this procedure, timidly, it must be confessed, in two successive sittings; and gained nothing more than some temporary increase in the ability of the patient in voluntary urination and in toning up his general condition. Although the electro-incisions incidentally did no harm, they did no good, and they had to be acknowledged as failures. Realizing this, I advocated a supra-pubic incision but could not get the patient's consent to an additional operation. Later, he reconsidered this determination, his objections melting away under the magnetic influence and persuasive powers of my friend, Dr. Graves, who made the supra-pubic opening, removed a growth projecting from the posterior commissure, and definitely cured the case. I am informed that the obstructing portion was somewhat pedunculated in form; and showed the marks of my cauterizer in being perforated through its middle.

Case II.—V. S., æt. 65 years, came to my clinic in October, 1901, suffering from various effects of prostatic obstruction, chief among which was complete and absolute inability to urinate voluntarily, and this, notwithstanding the fact that perineal prostatectomy had been done on him six months before (on June 6th, 1901) by an acknowledged authority in this mode of operating. The complete retention, relieved only by the regular passage of the catheter, had existed, the patient said, from the time of the withdrawal of the perineal drainage

tube, seven days after the operation. A perineal fistula still existed, from the same procedure.

Here was a case of complete failure of relief after removal of the prostate by an operator whose ability and experience cannot be put into question.

My cystoscopic examination seemed to reveal a projection from the posterior commissure, hanging somewhat into the bladder. With a doubt in my mind as to its probable efficacy in the case, which doubt I expressed to the class before whom I operated, on November 20, 1901, I made one posterior incision, 3 centimeters in length, with the Freudenberg incisor. Because of the absence of prostatic tissue, on account of the previous operation, it was evident that care must be observed not to burn into perineal structures. No hemorrhage resulted; cocaine anesthesia, secured with my urethral tablet-depositor, was so complete that the patient declared that there was no more pain than there was from an ordinary catheterism. He remained in the hospital three or four days, and was then about, as usual. Result, possibility of voluntary urination, and reduction of the complete retention to seven ounces of residual urine. One month later, the same operation was repeated, with no more trouble to the patient; and the net result was a further reduction of the residual urine to about four ounces, together with increased freedom in voluntary urination. This not being satisfactory to me—although a marked improvement over his condition for the previous five or six years—it seemed advisable to open supra-pubically, which I did before the class on January 8th, 1902. I found the condition represented by the clay model herewith presented (Fig. 1). A collarette of fibro-mucoid tissue completely surrounded the urethral orifice, and in just the position to fall together in a valvular manner and shut off the egress of urine when attempts at voluntary urination were made. The more marked the contraction, the tighter would the valve be closed. My posterior cautery incision was there, as shown in the model, but it had only bisected the posterior segment of the collar, the flaps of which could still fall together and interfere markedly with the outflow of urine—although the groove thus made would probably allow of the leakage through it of a part of the urine. This accounted for the improvement noted after each of the electro-incisions (reduction in the residual urine at first to seven, then to four ounces); and also for the failure of the incision to give *complete* relief to the case.

Through the supra-pubic opening, with a Paquelin cautery I burned off the whole of the projecting mass, accentuating the cauterization on the posterior aspect, to secure as low a level as possible;

nevertheless a considerable depression was still left in the bas fond, as I did not wish to open the prostatic urethra to secure an absolutely

FIG. 1.



Prostatic hypertrophy. Model of Schneider case. Lateral lobes removed 1901. Groove by Bottini through collar of fibromucoid tissue about urethral orifice. Complete relief from suprapubic operation.

"low level," flush with the bottom of the bas fond. My chief object was to *remove the obstruction*, which was done in the manner de-

scribed. Nothing was done bearing directly on the perineal fistula. It was considered that, with clearing up of the outlet, this would take care of itself. The bladder was drained supra-pubically for eight days. After the removal of the tube, and even before the supra-pubic wound was closed, the bladder was able to expel in a good stream through the urethra a part of the urine or the irrigation fluid. Since the closure of the wound, he has urinated properly and regularly, in what he esteems a very delightful stream. He can irrigate his bladder without the aid of the catheter; in fact, the catheter is now never used except for the purpose of testing the amount of residual urine, which has been reduced to one-half or three-fourths of an ounce. The frequency of urination is about normal (six or seven times in twenty-four hours). The patient has been able to resume his occupation of carpentering after an interruption of one year. He relates that previous to the prostatectomy, he had been forced to use the catheter regularly for nearly eight years, carrying it in his pocket for that purpose (from March, 1894, to November, 1901).

Case III.—W. D. æt. 65 years, was turned over to my care at the City Hospital, by my friend, Dr. Nietert, who, with his internes at that time, is familiar with the subsequent developments.

The patient had suffered from troubles connected with urination for four or five years previously. His general health and strength were markedly reduced, so that he was very feeble, looking much older than he really was. He was passing urine about thirty-five times in twenty-four hours, as often at night as in the day time, harassing him with loss of sleep as well as much actual suffering. His urine was of light straw color, low specific gravity (1.010), and contained albumin and casts, indicative of involvement of the kidneys. Cystitis was present. Residual urine was about twenty-eight ounces. A metal catheter of ordinary curve was obstructed, while one of long prostatic curve went in easily. Because of the enfeebled condition of the patient, and the renal complication mentioned, a more radical operation than the Bottini was deemed dangerous; and it was considered necessary to undertake even that with the utmost caution. The Bottini was done on January 27, 1898, under cocaine anesthesia, only one (posterior) incision being made in order to avoid severity as much as possible. It was ten days afterwards before noticeable improvement began, but it was progressive thereafter, so that in a month he was urinating freely and in a good stream; and instead of thirty-five times in the twenty-four hours, it was only seven or eight times. The residuum had been reduced to about two ounces. The patient's general and renal conditions had both improved materially. I was desirous of showing him at the Medical

Society, to which he consented, with the request, however, that we wait until he could be operated on for a large inguinal hernia, of which he was the bearer. We waited. He was turned over to another consulting surgeon who operated for the hernia. The wound became infected, resulting in gangrene there and also in the intestines and lungs. His death soon after enabled me to get this specimen, which I show you. As is usual after maceration in alcohol, the tissues, have shrunk somewhat, so that they do not appear exactly as they did when fresh; but the moderate enlargement of the prostate is evident, likewise the groove posteriorly and to the right, made by the incisor. The depth of this groove is only evident when we appose the parts as they were before the incision was made, when the narrowing of the outlet is seen to be marked. Dr. Willard Bartlett, who made the post-mortem examination, made the following annotation regarding it: "The prostate shows both lateral lobes hypertrophied. The wound left by what the clinical history terms 'Bottini's operation,' is completely healed, leaving an orifice to the right of the median line which will easily admit an ordinary lead pencil into the prostatic urethra, and evidently furnished a free outlet for the urine." The obstructive condition in this case was a bar-formation at the posterior commissure; the incision had severed it and opened a groove through which the urine could pass with only slight impediment.

Case IV.—Mr. C. L., aet. 50, came to me four years ago (April 15, 1898), referred by my friend, Dr. Y. H. Bond. Although I did not learn of it until later, the patient had just received the advice from a genito-urinary surgeon to undergo an operation on account of hypertrophied prostate, for the relief of the symptoms of which he was then complaining, *i.e.*, frequency of urination, burning during the act, etc.; symptoms only moderate in intensity and in number. Examining, I found slight cystitis, a very small degree of enlargement of the prostate, which was soft to the feel, as if congested rather than hypertrophied; and *not a teaspoonful of residual urine*. In addition, there was glycosuria, which proved to be diabetes of moderate degree.

I gave the patient my diagnosis, as above indicated. He asked as to the advisability of an operation for his "hypertrophied prostate." I said that I perceived absolutely no reason for such a procedure, and expressed the belief that less heroic measures would suffice. This advice was accepted; I gave his bladder a few antiseptic irrigations, put him on a regimen for his diabetes; and for the four years since that time, that he has been under my care and observation, his urine has been clear, he has suffered not at all from bladder symptoms, and his

glycosuria has been only an occasional factor. The patient has never had another symptom referable to his "prostate."

Now, Mr. President, I would like to ask, what was the use of my making the electro-incision in Case I., that was cured by Dr. Graves by the suprapubic removal of the obstructing, pedunculated projection? Or what would have been the use in removing that patient's prostate, either by the perineal or the suprapubic route?

In Case II., what benefit was derived from the prostatectomy that was done? The patient declares that he had to use the catheter after it the same as he had done for six years before.

And, in Case III., at the City Hospital, what would have been the advantage of subjecting such a frail, enfeebled being to the dangerous accompaniments of prostatectomy, necessitating general anesthesia, inducing hemorrhage, inviting sepsis (which did occur in a subsequent herniotomy, from which death resulted), and necessitating prolonged drainage, confinement in bed, etc., when he could, as was proved, be completely relieved with the one electro-incision that was made—causing no bleeding, no debility, fever, or other bad effects? Conservatism should hold as good in this department of surgery as in any other; if a less serious operation suffices in a given case, why adopt a greater?

As to the fourth case cited, its lesson is self-evident. No operation of any kind was indicated. It might have made a good case for adding to statistics as another "success," but the patient has not brought himself to the belief that it is necessary for him to immolate himself in that way.

The chief lesson of these histories, I take it, is that certain cases of prostatic obstruction are amenable to certain kinds of treatment, while for others the same kind of treatment would be wholly inapplicable or inadequate. This teaching of the clinic is confirmed and explained when we have the opportunity to study the actual conditions present in a number of cases of hypertrophied prostate.

I wish to present for your inspection some specimens of hypertrophied prostates and some reproductions of other hypertrophied prostates, illustrating a number of the different forms of this condition, exactly as it occurs in life.

In model No. 2 we have an illustration of considerable enlargement of both lateral lobes and of the so-called median lobe, of pronounced type. The median enlargement is in the form of a globular tumor springing, in a pedunculated manner, from the posterior commissure of prostatic tissue—the posterior junction of the lateral lobes. It projects well into the bladder and, placed as it is, directly overhanging the urethral orifice, this tumor would fall in just the position to interrupt

the outward flow of urine, acting in the ball-and-socket manner that is so effectual in making obstruction. It is apparent that the obstruction

FIG. 2.

Prostatic hypertrophy. Bilateral enlargement with obstruction from pedunculated intravesical growth. Suprapubic removal, operation of choice.

would be only to the current going outward; to the current or the catheter going inward, the tumor would gracefully back out of the way, permitting easy entrance. The median projection in this instance is in

the form of a globular mass or tumor, no effort at "bar" formation being present. The lateral lobes are about equally enlarged, but not so much

FIG. 3.

Prostatic hypertrophy. Moderate enlargement lateral lobes; thick prostatic bar; deep bas fond. Marked curvature of urethra. Favorable for perineal prostatectomy.

as to encroach on the caliber of the urethra nor to distort the latter into a narrow, tortuous slit, as is noticeable in certain cases. With the

FIG. 4.

Prostatic hypertrophy. Enlargement of both lateral lobes, pedunculated medial intravesical tumor from posterior commissure. Suitable for suprapubic removal.

median tumor out of the way, there is, apparently, nothing in this specimen that would cause interference with the outflow of urine.

In specimen No. 3 we see greater enlargement of the two lateral lobes, which project into the bladder cavity; and their posterior extremities are joined together by a bridge of tissue, forming a bar between the bladder cavity and its outlet. The higher this bar or dam, the deeper the stagnating pool of urine behind it, and the harder for the bladder to contract sufficiently to push the urine over the dam—even if it were not already in a weakened condition from over-stretching and inflammation. Where the hypertrophy is as large as it is in this case, the very mass of tissue itself, standing in the way, tends to interfere with the natural process of contraction of the bladder. There is persistent collection of urine in the receptacle (the *bas fond*) behind the bar; the urine that escapes on voluntary effort is only the overflow; that which remains is called “residual” urine. It is, as Guyon has shown, in a receptive state for infection with microbes; so that, when in this condition, the introduction of an unclean catheter may change the clinical picture from one of simple retention to one of retention plus infection, inaugurating a new list of harassing symptoms. The right lobe, in this model, is distinctly larger than the left; and the thick median bar is heaped up more on the right side than the left.

Specimen No. 4 shows an exaggerated degree of median hypertrophy, in a tumor-like mass, much larger than in the second instance. It shows the division of the urethra into two channels as the prostatic urethra mounts the bar towards the bladder cavity. In such a condition a metal catheter would be deflected to one side or the other, if it passed in; or, if of ordinary curve, it would be stopped short by impinging against the face of the tumor. In this case there is no bar formation; the hypertrophy and the obstruction are both essentially median, the lateral lobes being only moderately enlarged and not in such a way as to encroach on the outlet.

Specimen No. 5 is taken from an illustration of Erichsen, showing a vertical section of pedunculated median outgrowth. It indicates beautifully the manner in which the median tumor may cause obstruction by ball-and-socket effect, and without regard to the size of the remainder of the prostate. The bladder contracts to expel its contents; the ball falls directly over the outlet, closing it more or less according to its shape and the accompanying conditions.

Specimen No. 6 is in sharp contrast to the previous ones, being an enormous, uniform hypertrophy of the prostate as a whole, both lobes projecting far into the bladder in great masses. But the inevitable median enlargement is also present, making the bridge of tissue between the lateral lobes. This bladder was proportionately dilated, and the backward pressure was indicated, also, by marked dilatation of both

FIG. 5.

Prostatic hypertrophy. (Vertical section.) Pedunculated median intravesical growth from posterior commissure. Favorable for suprapubic removal.

ureters and both kidneys. One peculiarity about the backward pressure in this case was that it came onto the ureter-openings from the direct pressure of the immense lobes hanging over them. The lobes practi-

FIG. 6.

— — — — —

Prostatic hypertrophy. Excessive enlargement of lateral and median lobes; direct pressure on both ureter openings producing dilatation of ureters and renal pelves. Favorable for combined suprapubic and perineal removal.

cally filled out most of the space of the bas fond and rested on the ureter openings. I have never seen another instance of this kind.

Specimen No. 7 presents bilateral enlargement of the prostate, with a bar not so thick as the one in No. 3; and additionally, there is a nodule hanging over the urethral orifice from the upper margin of the right lobe. The right lobe is much more hypertrophied than the left.

FIG. 7.

Prostatic hypertrophy. Lateral lobes, especially right, enlarged. High prostatic bar, with small nodule on right, deep bas fond. Favorable for Bottini, or perineal prostatectomy.

The urethra curves deeply as it goes through the prostate, increasing its length, as well as its natural curve, while passing through that organ. By the pressing together of the two lateral lobes it is compressed into a slit-like channel. Altogether, the urine must have had a hard time

getting past the impediments presented in this case. That fact is attested in the depth of the bas fond behind the bar.

FIG. 8.

Prostatic hypertrophy. Marked enlargement of both lateral lobes, and globular intravesical tumor from posterior commissure. Removal of tumor and both lobes required; best accomplished through perineal and, possibly, suprapubic combined routes. Bottini inappropriate and inadequate.

Specimen No. 8 shows large, globular enlargements of the lateral lobes, marked compression of the urethra between them; and a large.

FIG. 9.

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Prostatic hypertrophy. Moderate enlargement lateral lobes. Pyramidal median projection capable of ball and socket effect. Suitable for suprapubic removal.

round median tumor from the posterior commissure, overhanging the urethro-vesical orifice.

Specimen No. 9, modeled after a pathological preparation belonging to Dr. Broome, shows a very unusual shape in the median projection;

FIG. 10.

Prostatic hypertrophy. Multiple adenomata projecting into prostatic urethra. Favorable for perineal removal. Bottini inappropriate and inadequate.

it is pyramidal, and stands well into the bladder cavity. The lateral lobes are enlarged to only a moderate degree.

Specimen No. 10 shows a number of tumor-like masses (adenomata) pressing into the prostatic urethral cavity; and, although they

FIG. 11.

Prostatic hypertrophy. Moderate enlargement of both lateral lobes; no median enlargement, unique in that respect. No operative treatment required. After Watson.

have widened out that cavity, they have at the same time encroached on its space for carrying urine.

Speciment No. 11 shows a departure from the usual form of enlargement that, so far as my acquaintance goes, is almost unique. The median tumor, instead of springing from the posterior commissure, hangs from the anterior one, jutting into the urethral orifice in such a

FIG. 12.

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Prostatic hypertrophy. Photo of unique specimen. Intravesical globular tumor springing from anterior commissure, falling backwards, obstructing out-flow. A, urethral orifice B, blind pocket in apex of tumor. P, posterior bladder wall. Suprapubic removal, operation of choice; inaccessible through perineal route; possible benefit from anterior Bottini incision.

way as to effectually cut off the escape of urine. A perineal prostatectomy would be very liable to leave this tumor in its present position, working, as the operator must, from below, and at the same time endeavoring to avoid injury to the anterior urethral wall, as he usually does.

The main reliance in the Bottini operation is on the posterior incision. If made in a case like this, or if supplemented by two lateral incisions, or even an anterior one in addition, it would be doubtful if

any benefit would ensue. Certainly benefit would not come from the posterior or lateral incisions.

From these several specimens it is evident that, although the prostate has a pretty well-developed habit of enlarging in a certain *direction* (toward the bladder cavity), its *forms* of enlargement, and the several combinations of these, offer much variety.

In looking up the relative frequency of these various kinds of enlargements, I find that some form of median elevation is seldom absent. For instance, in Watson's review of 28 cases of prostatic hypertrophy there was only one case in which there was no median hypertrophy; in Sir Henry Thompson's analysis of 123 cases, it was absent in only 11 cases, and as I reviewed Moullin's tables of 140 operated cases I found that there were but 17 cases in which no mention of the median outgrowth was made in the records of the operator. It is evident, then, that median enlargement is nearly always present; it is absent in only about 8 per cent. of cases, taking an average of these three collections.

Examination of the same three sets of records will show that they may be divided as follows:

Median, with general enlargement,

(a) of one lateral lobe, 33.

(b) of both lateral lobes, 106.

Median without general enlargement,

(a) tumor-like projection, 46.

(b) bar or collar, 23.

To meet these several conditions in an operative way, there are a variety of methods. Classified under the avenue of approach, they may be divided into the suprapubic, the perineal, the combined perineo-suprapubic, and the urethral.

In some cases (specimens 1, 5, 9), the snipping off of a pedunculated tumor overhanging the urethral orifice is all that is needed to relieve the obstruction. A greater operation than this is not required; a lesser one is inadequate, and an electro-incision that simply bisects it, does no good.

Such a tumor is accessible and demonstrable through a suprapubic opening, through which route the operator can work to good advantage under direct observation, with ample light, using the actual cautery if necessary. There are several instances recorded in which operators working through a perineal opening failed to discover or to remove such a protuberance, and were unable to relieve the obstruction until a later, suprapubic, operation disclosed the reason. It is not difficult to understand how this may be, in a case, for instance, with long perineal distance, large lateral lobes, and tight, narrow urethra, with high implantation of the tumor.

On the other hand, there are certain cases in which there is short perineal distance, massive overgrowth of both lateral lobes, and either a sessile median enlargement or a thick bar formation, in which the perineal is the more favorable route for removal, following out the lines laid down by the later operators mentioned (omitting, however, the accessory suprapubic incision, either of the combined operations, or the incision into the space of Retzius as recommended by Bryson). Save in a few exceptional instances, the upper incisions, for the purpose of depressing the prostate into the perineal wound, are no longer necessary or advisable, the prostatic depressor of Ferguson supplying this need without the added opening. The rubber bulb of Syms has not proved a success, for several reasons.

TABULATION OF METHODS OF OPERATION ON THE HYPERTROPHIED PROSTATE.

Supra-pubic	{	Drainage	— Hunter McGuire, 1888. Permanent supra-pubic fistula.
		Prostatectomy	Belfield, 1886. Enucleation. Modified in 1890 by adding perineal boutonniere for drainage. McGill, 1887. Enucleation, morcellement, exsection. Freyer, 1901. Total enucleation of prostate in its "true" capsule; rectal counter-pressure; urethra left intact.
Perineal	{	Incision	— Reginald Harrison, 1887. Knife-incision and drainage.
		Electro-incision	Wishard, 1890 and 1902; Chetwood, 1901. Von Dittel, 1890. By coccygeo-perineal incision.
		Prostatectomy	Wishard, 1891. Intra-urethral incision and enucleation. Pyle, 1892. Through semi-lunar incision. Syms, 1901. With rubber bulb traction for depressing prostate.
	{		Ferguson, 1902. With intra urethro-vesical prostatic depressor; subcapsular enucleation and morcellement. J. B. Murphy, 1902. Prostatic depression with hooks.
Combined Perineo-prevesical	{	Prostatectomy	Fuller, 1895. Enucleation from above, counter-pressure against perineum; drainage above and below.
			Nicoll, 1895. Perineal enucleation, counter-pressure from above through opened bladder; drainage through catheter retained in unopened urethra.
			Alexander, 1896. Perineal enucleation, intra-urethral attack; counter-pressure from above through the opened bladder; drainage above and below.
			Bryson, 1899. Perineal subcapsular enucleation; supra-pubic prevesical incision (not opening bladder) for counter-pressure; drainage below.
Urethral	{	Incision	Syms, 1899. Perineal enucleation; counter-pressure through epicystic incision into peritoneum.
			Guiteras, 1901. Supra-pubic enucleation, counter-pressure from finger in rectum; drainage above and below.
			Mercier, 1857. Buried knife.
			Gouley, 1885. Buried knife.
	{	Incision	Bottini, 1875. Electro-incision.
			Freudenberg, 1897. Electro-incision with aseptic instrument provided with cooling apparatus.

Some operators, while adopting incisions both below and above, make use of the upper one as the chief avenue for making the removal of prostatic tissue, using the lower one only for additional drainage (Belfield, Fuller, Guiteras).

While the older modes of doing suprapubic prostatectomy, as at first described by Belfield and McGill, have practically been abandoned, Freyer in the British Medical Journal, February 1, 1902, describes a mode of taking out the whole of the prostate in two lateral halves, through a suprapubic incision, leaving the urethra unopened. He reports gratifying success with this method. In one case he removed a prostate weighing $10\frac{1}{4}$ ounces, with permanent relief. While this is true, from the studies of the specimens I have shown, and the statistics presented, it is questionable whether it is necessary or advisable to make complete prostatectomy. It has been shown that the obstruction comes, in nearly all cases, from either the posterior commissure or the lateral lobes or both, but very seldom from the anterior commissure; so why should this unoffending part be removed? Aside from this operation of Freyer, most of the methods produce only partial prostatectomy, leaving the anterior urethral wall and commissure intact—and it is particularly desirable that they be left intact, to make the nidus for the regenerated urethra. In the later perineal operations the floor of the urethra is ordinarily torn away.

While the Bottini electro-incision is not appropriate for all cases of prostatic obstruction, the same thing may be said with equal propriety regarding all the other operations for this condition. There is, I am convinced, a considerable place for this method in this field. Without here referring to the objections made to it by its opponents or to the advantages claimed for it by its advocates, it may be said that the especial forms of prostatic obstruction in which it will find the best application are those of the prostatic bar, or the sessile median hypertrophy, both of which are not unusual forms of the abnormality. Pedunculation of outgrowths, complete collar formation, and massive lateral lobes, are conditions not favoring success with this method. While in some cases of massive bar formation, as in specimen No. 6, an electro-incision would hardly be sufficient to make a good outlet for the urine, such an excessive development is very exceptional; and it will be even rarer as the operability of prostatic hypertrophy becomes more widely recognized. On the other hand, there are, doubtless, a number of cases of either bar or sessile median hypertrophy that undergo one or other of the modes of prostatectomy, with general anesthesia, hemorrhage, prolonged drainage, confinement to bed, etc., that might be permanently relieved by electro-incision, under local anesthesia, unaccompanied with bleeding, and not followed by the after-effects of the major procedure. Many such cases *have* been cured by it, we know. If there have been many failures, we must attribute a large proportion of them to lack of making proper selection in applying the method.

Summing up the points favorable to the three operative procedures especially considered in this discussion, we have:

Favorable for the supra-pubic route:

1. General enlargement of the prostate, with extreme intra-vesical projection of the median or lateral lobes, diminishing their accessibility from the perineum.
2. Marked pedunculation of the intra-vesical tumors, with absence of obstruction from other sources.

Favorable for the perineal route:

1. General hypertrophy, involving the median and lateral lobes, without extreme intra-vesical projection.
2. Large or very thick bar formation; marked compression of the urethra between the enlarged lateral lobes.
3. Excessive development of the prostate in the direction of the rectum.
4. In most cases, where the patient is in good general condition and there is not a special indication favoring one of the other procedures.

Favorable for the Bottini:

1. Cases of extreme debility, unable to stand one of the severer operations.
2. Cases of bar or medium sessile obstruction, of not too great dimensions.
3. Incomplete collar formation.
4. Horwitz says it should be employed as a prophylactic against further obstructive hypertrophy, at the beginning of catheter-life.

Supra-pubic cystotomy for drainage only, is a palliative measure that has certain well-defined and highly advantageous features—not with reference to curing a case of prostatic obstruction, but for the purpose of improving conditions so that curative measures may be undertaken. It can be carried out under local (infiltration) anesthesia, without adding to the seriousness of the conditions; and the drainage that it affords may work wonders in the manner mentioned.

As a substitute for this incision, being even milder still in its effects, I would commend a method that I have carried out on one or two cases, as follows: Supra-pubic puncture with trocar and cannula; withdrawal of the trocar; insertion of a soft rubber catheter through the cannula into the bladder; withdrawal of the cannula, leaving the catheter retained in the bladder, and held in place by safety-pins and proper bandages. I drained one case for ten days in this manner and without ill effect.

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A CASE OF MYCOSIS FUNGOIDES.*

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THE following case is reported chiefly because of the facts that it was under observation of physicians for a period of 5 or 6 years, after appearance of subjective symptoms and was in hospital the last two months of patient's life. That microscopic examination of tissue removed from tumors was made at time of his entrance—and a much more thorough post mortem examination was made than is ordinarily practicable—offering opportunities for study of progress of disease and results. And though there was abundant evidence of metastases, no specific organisms by microscopic or culture tests were found. The subject has been so very fully discussed in current dermatological literature within the last few years that no attempt is made to review the pathology further than showing the changing views and diversity of opinions of observers and reporters.

Extract from Clinical Record.—H. H. D., 33, married, entered U. of M. Hospital, Oct. 30, 1900 (after being under my care a few weeks). Occupations: Had been carpenter, keeper in prison, mail carrier and employee on R. W. Family history, negative as to parents. No history of specific or hereditary disease in family. Has two children, 12 and 4, in good health.

Previous History.—Digestion, normal, some headache. Has had rheumatism. Treated by numerous physicians for eczema in early stages of his disease.

Present Condition.—Appetite, excellent; digestion, good; bowels, regular; sleeps poorly; urine in large amount, but negative. Trouble with skin began six years ago on leg as a scaly condition of skin. January 1, 1898, tumors developed on wrist, arm, neck and forehead and nose. Feet very moist and always smelled badly, skin of feet cracked and exuded liquid. Location and description of lesions (see photo No. 2 taken about this time) face, head and neck covered by nodules of all sizes up to two inches, some smooth, others rough and ulcerating, and offensive in odor; nodules under each arm and legs, one on right arm; little finger of right hand removed a few weeks

* Read before the Ann Arbor Medical Club, April, 1902.

before on account of large nodules, stump healed kindly; hair began to fall five months ago, when the tumors started on the scalp.

Microscopic examination of tissue gave structure of growth as that of lymphosarcoma and microscopical diagnosis as general sarcomatosis of the skin.

The patient steadily grew worse and died from exhaustion January

FIG. 1.

Taken two years before Fig. 2.

10, 1901. He suffered last few days from bronchopneumonia, many of the tumors undergoing marked change in size and shape.

The patient was under the care of Dr. A. P. Biddle of Detroit, who reported the case to the Detroit Medical Society in latter part of 1898, published in January, 1900, in *The Physician and Surgeon*.

Dr. Biddle's report so fully describes the appearances of the prefungoid stage, as well as the early tumor stage, that I quote freely from his valuable paper:

(Photograph No. 1, taken by Dr. Biddle, August, 1900).—"He

presented in his early personal and family history nothing that would throw light upon the etiology of the disease from which he was suffering. He was well nourished, large, strong man, and his general health was excellent. He had been treated for two years by one physician and another for psoriasis, not an unnatural mistake as in the early and

FIG. 2.

Figs. 2, 3 and 4 taken two months before death.

prefungoid stage the disease in so many respects resembling psoriasis, as to be impossible of differentiation. The tumor stage had already set in, so that I knew the disease could not be psoriasis, though the body was profusely covered with a brownish red slightly elevated scaly eruption, in patches, mostly discrete, but sometimes confluent of a

variegated pattern, but with a tendency to irregular oval and gyrate figures, bearing some resemblance to psoriasis but differing from it in that the infiltration was not as deep, the individual patch not as red, the margin not as well defined, the scales not as white, the scaling not as profuse, and the itching decidedly more intense. The disease dated

FIG. 3.

back about four years, and was brought to the patient's notice by an excessive itching behind the ankle-bones while working nights at the State Prison, as guard. The itching extended with increasing vigor gradually over the other portions of the body, and the skin became hyperemic and scaly, especially on the flexor surface of the forearms; then small nodules appeared under the skin. Oozing was more or less constant, even under the dry skin, when scratched. This condition cov-

ered a period of three years, when the tumors began to form, the first one being noticed about Christmas time of 1897. There were now numerous tumors over the body varying in size from one-half to three inches in diameter. They were well defined, firm, rounded, raised above the surface, but flat and more or less freely movable.

FIG. 4.

In nearly all, there was ulceration on the surface with free oozing of a watery offensive adhesive fluid. The tissues were partly necrosed and bled easily when the covering was torn away. The color was of a pinkish purplish hue.

Dr. Biddle states that Dr. Angus McLean and himself, between April 2d and June 11th, 1898, removed various tumors of different

sizes with local anesthesia only, by Schleich's method. It was noticed that when a portion of one of the tumors of the neck was removed for examination, the remaining portion gradually became absorbed. No time was lost from patient's work, and the tissues healed rapidly. Internally thirty drops of Fowler's solution a day was given. One large tumor situated in the center of the back, which showed signs of absorption in June, had almost entirely disappeared in July, and at time of writing, 1899, nothing remained at former site but an increased pigmentation.

The skin of face and neck had cleared up very much, though numerous tumors remained on various parts of his body. His general health continues unimpaired, and since the removal of the tumors, the patient's spirits have improved, though he has always shown a remarkable fortitude throughout his trouble.

I am much indebted to Dr. Warthin for report of a very thorough post mortem and to Dr. Novy for culture and inoculation tests. Only so much of the full report is given here as pertains to the sarcomatous condition and to the structural changes found.

Died Jan. 10, 1901. A.M. Time of autopsy, Jan. 10, 1901, 11 A. M.

Clinical Diagnosis: Mycosis fungoides.

Pathological Diagnosis: Sarcomatosis of skin; secondaries in tonsils, tongue, right lung cervical, axillary, cubital and inguinal glands (small round cell or lymphosarcoma), melanosis of skin, acute bronchopneumonia, chronic congestion of spleen, liver and kidneys.

Fatty degeneration of liver. Primary edema of Pacinian corpuscles.

External Examination. Skin.—Markedly pigmented (about color of Addison's disease). Pigmentation more marked over the abdomen, sides of thorax, flexor surfaces. Skin of the scalp, neck and face presents a diffuse nodular growth covered with dried exudate. Nodules are firm, slightly elastic on pressure. Growth over the neck is more fungoid, there is great distortion of the face, the left eye completely hidden, the growth is larger on the left cheek, so that the face of the cadavers bears little resemblance to that of a human being, though tumors, much shrunken after death.

In addition to these, on the face and head there are other more or less flattened growths on the flexor surfaces; axillary, right forearm, both popliteal spaces and right side of thorax; other smaller nodules are scattered over thorax and extremities. The smaller nodules are covered with epithelium and are firm and elastic. Larger growths are ulcerating, some are umbilicated, others are flat, showing superficial erosions. Growths vary in color,

being yellowish white to deep red, due to superficial vessels or dried blood. Inguinal glands are enlarged. There is a mass the size of a goose egg below Poupart's ligament on the right side. Axillary and cubital glands enlarged. Small umbilicated growth, size of a coffee bean, over the skin of the scrotum.

Throughout, especially over the extremities, are large numbers of small, white flattened scars.

Cross section of the large mass below Poupart's ligament and of masses in all parts of the body show the same appearance: Mottled red and white in color; surface smooth, almost homogeneous. Yields abundant juice on scraping. No stroma visible to naked eye. Growths of the neck and head are of firmer consistency than those over lower part of the body. Between the lesions the skin is dry and scaly, thickened especially about the nipples and about the growths.

Hair.—Body hair is markedly atrophic, absent over the scars, very scanty over the genitals, almost absent over the scalp.

Muscles.—Small, emaciated and flabby. On section, pale brownish red in color, tear easily. Rigor mortis present throughout, broken with great difficulty.

Panniculus.—Almost absent. On section, dry, tough; in color, pale orange.

Edema.—Slight over the lower extremities.

Head.—Scalp much thickened—at many points adherent to periosteum. New growths on forehead extend to periosteum eroding the bone.

Skull Cap.—Unusually thin along the anterior part of the longitudinal sinus. Lamina vitrea eroded. Pachionian depressions and meningeal grooves unusually well marked.

Dura.—More tense than normal, more than usually adherent to the arachnoid along the course of the longitudinal sinus. Longitudinal sinus negative.

Inner Meninges.—Pial veins congested. Pia and arachnoid slightly adherent over the base of the brain. Circle of Willis negative.

Cerebrum.—Slight congestion and edema of cortex.

Ventricles.—Lateral ventricles slightly distended. Third ventricle negative. Slight cystic change in the choroid plexus. Pineal preserved. Cerebral ganglia. Cerebellum pons medulla negative. Spinal cord not examined.

Position of thoracic organs negative.

Mediastinum.—Contains little fat, no enlarged lymph glands.

Thymus.—No remains of thymus. Thymus fat in small amount contains a few small lymph glands.

Pleura.—Left cavity contains about 60 c.c. turbid yellow fluid. Pleura of right and of left anteriorly is clear, shining; on posterior part of left is dull with scattered fibrin flakes.

Pericardium.—Contains a small amount of turbid fluid. Parietal and visceral layers are clear, shining. On anterior wall of left ventricle, just above the apex, are a few fibrin tags (old adhesions). Subpericardial fat in small amount. Shows serious change.

Heart.—10½ oz. Normally located. Auricles contain jelly clot, also white antemortem clots. Muscle is deep brownish red in color, is soft, tearing easily. Thickness of right ventricle wall 3 mm.; thickness of left ventricle wall 6 mm.

Valves.—Orifices are negative. Thickening of posterior flap of the mitral valve. Beginning arterio sclerosis especially about coronary vessels.

Left Lung.—Wt. 1 lb. Length 25 cm., width 20 cm., thickness 7½ c., 7½ cm. Voluminous, entirely covers the heart. Adherent over posterior part of the lower lobe. In color, pale gray pink. Anthracosis moderate. In border are a number of small, flat airless areas.

Section.—Lung bleeds freely, parenchyma pale pink, slight hypostasis in the lower lobe. In one of the airless areas at the edge of the lobe is an area of calcification. On pressure there is abundant foamy exudate.

Right Lung.—20½ oz. 25x17½x6 cm. Voluminous, not so large as the left. Free throughout. Posterior portion of the lower lobe is hypostatic, almost airless. Upper and middle lobes resemble those of the left side.

Section.—Lower lobe is airless in greater part. On pressure yields abundant exudate. Many smaller bronchi contain pus. Color is mottled blue red to grey. Cut surface shows elevated grayish granules, size of pinhead to that of pea.

Bronchial Glands.—Moderately pigmented; a few are moderately enlarged. Section shows no change. Thoracic duct negative.

Abdomen.

Abdominal Cavity.—Contains no fluid. The coils of the intestine more than usually moist. Liver is enlarged, border in the median line being two finger breadths above the umbilicus. Omentum and mesentery poor in fat. Intestines collapsed. Intussusception in small intestine (post mortem).

Spleen.—Wt. 8 oz. Entirely covered by the left lobe of the liver. There is an unusual number of deep fissures on the anterior and poste-

rior margins. Capsule is slightly thickened and slightly wrinkled. Through the capsule the color is blue red. Consistency is firm.

Section.—Spleen is blue red in color; firm, not rich in blood. Follicles are numerous and enlarged; majority are larger than a pin head. Accessory spleen in pancreatic splenic omentum is almost round, dark blue in color.

Adrenals.—Show post mortem change.

Left Kidney.—6 oz. $11 \times 6\frac{1}{4} \times 3\frac{3}{4}$ cm. Anterior surface is irregular in shape; thickness of the kidney is increased over the lower $\frac{1}{3}$, thickness is greatest about the middle. Depression along the upper two-thirds is due to the liver border. Fatty capsule is poor in fat. Fibrous capsule strips off easily. Surface of the kidney is blue red in color; smooth. Fetal lobules are unusually well marked; venæ stellatæ are moderately congested; two small retention cysts in the cortex. Cut surface is blue red in color. Consistency firm; cortex $\frac{5}{8}$ mm. in thickness. Outlines between the labyrinths and medullary distinct; glomeruli not very distinct. Mucosa of the pelvis is negative.

Right Kidney.— $4\frac{3}{4}$ oz. $11 \times 6 \times 2\frac{1}{4}$ cm. Normal shape. Fatty capsule poor in fat. Fibrous capsule strips off easily. Surface is similar to left. Section is similar to left.

Bladder.—Small; contains a small amount of urine. Wall is thickened. Mucosa is congested.

Duodenum.—Wall is thinner than normal; duodenum contains bile stained fecal material. Bile passages are open.

Stomach.—Pylorus admits finger with some difficulty. Stomach contains blood-stained fluid with some odor. Mucosa covered with yellow green mucous (beginning post mortem change); no enlarged lymph follicles.

Small Intestine.—Mucosa is injected; contains no enlarged follicles. Peyer's patches are not enlarged.

Appendix.—Narrow, white, slightly constricted about the lower third.

Large Intestine.—Contains greenish, soft, unformed fecal material. Solitary follicles in colon slightly enlarged. In cæcum are transverse ulcerations.

Liver.—5 lbs. 11 oz. $30 \text{ cm.} \times 22\frac{1}{2}$ cm. Greatly enlarged, filling the right and left hypochondria; enlargement of left lobe very marked. Capsule not thickened. Mottled reddish blue and yellow in color. Consistency firm.

Section.—Cut surface is lighter than normal. Consistency increased, especially near the surface. Lobules not very distinct. Central vein slightly filled with blood. Surface is more shining than normal

and shows a few small white points varying in size from pin point to pin head. Gall-bladder distended by golden brown bile. Portal vein negative.

Pancreas.—Normal size and shape. Consistency slightly decreased. Section shows no change.

Mesentery.—A few enlarged lymph glands back of the pancreas. In the root of the mesentery, near the pancreas are a number of pearl like bodies, rather flattened, size of a millet seed to that of a small pea

FIG. 5.

Low power. Section through depth of tumor.

—probably Pacinian corpuscles. Mesentery contains a number of slightly enlarged lymph glands, dark red to blue in color. Retroperitoneal glands and glands along ascending vena cava not enlarged, show a dark pigmentation.

Genital Organs.—Moderate phymosis. Ulceration of surface of foreskin and glands, extending into urethra. Purulent discharge from urethra. Otherwise negative.

Microscopic Findings.

Skin Lesions.—Sections made from growths in the skin, taken

from all parts of the body, show the same structure, namely, that of round cell or lymphosarcoma.

The smallest of these growths are confined to the lowest part of the derma, grow by expansion, pushing the papillary layer of the derma and the epidermis upwards. There is but little infiltration about the growths, many of which possess a more or less distinct capsule of connective tissue.

In the majority of cases the smallest growths lie between the

FIG. 6.



Low power. Section shows limitation of tumor process below.

papillary layer and the sweat glands. The structure of the smaller growths is made up of small round cells of nature of lymphocytes among which are larger cells having more abundant protoplasm and less deeply staining nucleus, occasionally containing several nuclei. There is an abundant stroma and throughout the smaller growths are remains of the original connective tissue of the dermis, and occasional retention cysts arising from the sebaceous glands.

On the whole the growths are not richly supplied with blood vessels, many contain numerous small thin-walled vessels lying in direct contact with the cells after the manner of a sarcoma.

There are very numerous and heavily pigmented chromatophores in the papillary layer just above the growths. Sweat glands in the

FIG. 7.

Higher power. Cells and intercellular substance.

FIG. 8.

Cells, intercellular substance and vessels.

neighborhood of the smaller growths are hypertrophic, many of them to such an extent that they take on the character of an adenoma, around these there is a more or less inflammatory infiltration; a similar process

is seen in the subcutaneous fat. The larger growths have broken through the epidermis—show a more or less ulcerating surface and extend deeper into the subcutaneous tissue. Occasionally they show areas of simple or liquefaction necrosis, but retrograde change is uncommon; others show an increase of the stroma with atrophy of the round cells with formation of scar tissue replacing the tumor. All stages of this process can be observed up to the completely healed growth, so that throughout the skin of the entire body are found numerous circumscribed areas of scar tissue giving the appearance of progressive development and subsidence of the tumor formation.

In the central portion of the larger growths the majority of the cells have lost their protoplasm, the nucleus remaining either free or surrounded by granular remains of protoplasm. Mitosis is seen in many of these free nuclei. No giant-cells are present, and mast cells are found only in small numbers. Cell-division figures are abundant.

Sections of the skin, taken from all parts, show excessive pigmentation of the chromatophores, circumscribed areas of scar tissue and scattered areas of small-celled infiltration most marked about the sweat glands. Number of mast cells appears to be decreased.

Tonsils.—Both tonsils almost completely replaced by growth similar to that in the skin.

Tongue.—Small nodules of growth of similar structure on dorsum of tongue showing ulcerated surface.

Lymph Glands.—The cervical, axillary, cubital and inguinal lymph glands are replaced by large nodular masses similar in structure to those in the skin. No secondaries could be found in either the bronchial, mediastinal, mesenteric or retroperitoneal glands. The latter show marked congestion; some edema; in some cases a chronic lymphadenitis.

Hemolymph glands.—Show hyperplasia of stroma. Excessive pigmentation.

Thyroid.—Slight colloid increase.

Lungs.—Atrophic emphysema in the lower lobe. Edema and congestion. Extensive bronchopneumonia of the lower lobe and scattered nodules of small-celled infiltration replacing the alveolar structure, showing no necrosis and containing new blood vessels, most probably secondary nodules of the skin tumor. Majority of smaller bronchioles contain purulent exudate and there are numerous fresh and partly organized thrombi found throughout.

Heart Muscle.—Brown atrophy. Occasional fibroid areas. Section of the mitral flaps show marked sclerosis with beginning atheromatous change (old endocarditis).

Spleen.—Marked hyperplasia, especially of the follicles which are greatly enlarged, much nearer together than normal from the atrophy of the intervening pulp. Blood spaces enlarged; no amyloid found. A small accessory spleen shows similar structure.

Kidneys.—Slight atrophy, beginning cloudy swelling, congestion.

Liver.—Majority of lobules are large. Fatty degeneration of the cells of the central zone, fatty infiltration of cells in many areas of the peripheral zone. Congestion of central vein and capillaries. Numerous hypertrophic nuclei. No amyloid.

Adrenals.—Show post mortem change.

Pancreas.—Shows post mortem change.

Pacinan Corpuscles.—Show primary edema and cystic change.

Bacteriological Findings.

Staining of sections of skin growth for micro organisms by Gram, Weigert's fibrin method, methylene blue, carbol fuchsin, etc., negative.

Cultures made by Dr. Novy at the autopsy were likewise negative (Cultures were made upon blood serum; taken from heart blood, also from a number of growths which were excised whole).

Points Favoring Sarcoma, and Not Granuloma.

1. Large numbers of cell-division figures—these are less common in granuloma.
2. Absence of giant-cells which are common in most granulomata.
3. Small numbers of mast-cells and plasma cells, which are usually abundant in or about granulomata and chronic inflammatory processes.
4. Entire absence of micro-organisms, as shown by cultures and staining methods.
5. Nature of metastases.

In a paper read before the Michigan State Medical Society, June, 1895, and appearing in the *JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES*, August, 1895, I reported "Two cases of tumors of the skin. One diagnosticated as multiple pigmented sarcoma. Diagnosis of the other reserved," reviewing somewhat fully, though condensed, the accessible literature of the subjects of sarcoma cutis, granuloma and mycosis fungoides. In concluding the report of the first case and quoting the conflicting views of pathologists, and summarizing the opinions, which fairly represented authorities, I stated that "It will be seen that the differential diagnosis of idiopathic multiple pigmented sarcoma of the skin, and mycosis fungoides is neither easily nor certainly determined as yet, by standards heretofore accepted as established."

The second case was seen only two days before paper was read, and the report was necessarily brief. Microscopic examination of tumor on back showed small round celled sarcoma.

There was nothing in family history, either case to indicate any hereditary or acquired specific disease, and there was no evidence that either of the patients gave rise to infection in others.

No micro-organisms were found in either, in sections removed during life, or post mortem, in the second. No post mortem was obtained in the first case.

The history of the first case covered about two and a half years. The second between six and seven years.

The following extract from report shows contrasts in clinical appearance of the two cases:

The salient points of difference in physical conditions, patent at a glance at the photographs, are, the great number and size and nodular character of tumors on extremities in the first case, the elephantiasis-like condition of feet and lower legs, the dry hard darker colored skin, the tenderness and pain, the shorter history and more rapid progress of the first case; and the absence of tumors on the extremities of the second case, though there had been papules, vesicles and small nodules on feet, leaving scales and large macular cicatrices, the absence of pain or much tenderness, but constant pruritus, the more flattened shape of tumors, and the marked prominence of the glandular involvement, the soft reddish color of tumors, and the moist condition or lack of dryness of the skin, and the ability of the patient to be on foot and do so much work with her hands.

The points of resemblance are the facts of both beginning in the hands and feet, the spontaneous improvement at times and retrogression, the rapid growth of tumors and equally rapid resorption, involution, or disintegration, and the absence of anything like typical ulceration. Should the diagnosis of the late case be made on physical conditions and history, it would be called, I think, mycosis. Should it be made on the microscopic findings alone, it must be sarcoma.

I had opportunity to make post mortem in this later case nearly a year later, and found metastatic growths of same structure as external tumors in abdomen, in mesentery, spleen and liver. This fact has not previously been published.

While the study of these dermatoses has been prosecuted with greater vigor than ever within the last few years, and a large number of valuable contributions made to the literature of these forms of disease of the skin, there is still a good deal of diversity of opinion in classification of different cases.

What constitutes a type? and what are "Exceptions that prove the rule?" It is sometimes asked "What's in a name?" "Would not such malignant disease be as repulsive, grow worse and die as certainly, whether called mycosis or granuloma, fungoides, sarcoma, idiopathic or traumatic, pigmented or nonpigmented, sarcomatosis cutis, or generalis—whether of bacillary or other origin? Especially in a disease of such comparative rarity?"

But such questions might be asked about almost every disease of indefinite pathology, and notwithstanding the tendency in dermatology, to complicated nomenclature, it is in the interest, not only of a better understanding of diseases of the skin, but of all Medical Science, to select names expressive of conditions.

"Bright's disease conveyed an indefinite condition before the different forms of nephritis were defined. By the same reasoning mycosis might have been called 'Alibert's disease.'"

If we regard a clinical diagnosis as tentative—a working diagnosis, and not final—the assumption which is to be completed by demonstrating its truth or error, by the aid of microscopic, bacteriologic, chemic and all other means, then we should be less confused by various kinds of diagnoses, but the final diagnosis, when it can be determined, would be more comprehensive and complete.

There is a marked difference between sarcoma as viewed clinically from the surgical standpoint of a few years ago, and making it the head of a group of dermal affections. The beautiful accuracy and reliability of microscopic findings in some cases, and the disappointing results and contradictions with clinical observations and experiences in other cases, is frequently seen. Yet out of all these somewhat unsatisfactory efforts distinct progress is made.

Among the papers bearing on this question of diagnostic classification of clinical features and histo-pathology, presented within the last few years, two may specially be mentioned as covering much of the yet unsettled ground, and as fairly representative of the literature of past three years, and that bear on the case in point:

First.—Dr. Jas. Nevins Hyde's address before American Dermatological Association, '98: "A contribution to the study of the so-called premycotic stage of mycosis fungoides."

Second.—An address by Dr. J. C. Johnston, before the same association in 1901.

Dr. Hyde, summarizing the different interpretations by different writers of clinical and pathological features of mycosis fungoides, says:

(a) "Mycosis fungoides is one of the varieties of sarcoma differing chiefly from the classical type of that disease in the fact of the

occurrence in many cases of dermatoses which precede the formation of tumors." (Practically the position of Kaposi, who regards mycosis fungoides as a clinical type of a single disorder in a group of what he calls sarroid diseases, with lymphoderma perniciosum cutis, leukemia cutis, and sarcomatosis, as other members of the same group, all exhibiting between them clinical and histological transitions)."

"But opposed to this view are the spontaneous disappearance of many of the tumors, a species of involution rarely, if ever, observed in any other tumor of a malignant type; second, the histological structure of many of the lesions in mycosis fungoides differ widely from the appearances recognized in sarcoma. Third, mycosis fungoides is essentially from the first a cutaneous malady, while sarcoma more often attacks other organs than the skin.

"Furthermore, that the term sarcoma has not the same significance it had even a few years ago, and that some of the affections to which the name was given are now not recognized as sarcomatous.

(b). "That mycosis fungoides belongs to the family of infectious granulomata—histologically a more tenable view, but thus far no pathological organism has been discovered, and no history of infection or contagion reported."

(c). "A view promulgated in France which discovers in its phenomena a primary lesion at the site of infection, and the evolution of a disorder in relatively definite stages analogous to those of syphilis."

Hyde concludes a preliminary report based on a review of over forty-five cases in which various dermatoses existed and were studied for months or years before the tumor formation began, and upon incomplete bacteriological and histological investigation of two cases. The work done will not justify definite conclusions regarding the nature of the disease, but we think it furnishes some evidence in favor of the belief that there are early dermatoses, though differing considerably in clinical type, have many characteristics in common, and are the varied expressions of a definite morbid process, that the disease is quite distinct from sarcoma, and that it differs markedly from the recognized infectious granuloma in that its manifestations are confined to the skin, but one case having been reported in which internal organs are involved.

Dr. J. C. Johnston, in JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, July, 1901, in an able paper under title, "Sarcoma and the Sarroid Growths of the Skin"—an endeavor to bring about if possible an agreement in the consideration of the subject of sarcoma in dermatological and general pathological literature. In a "histogenetic" classification he divides sarcomatous neoplasms into

three groups: (1) Fibroblastic (true) sarcoma; (2) the lymphoid cell class, and (3) sarcoid growths. There is no clinical sign by which to distinguish the cellular varieties of sarcoma.

"Sarcoma is ordinarily divided according to the type of its cells into spindle, round and myeloid, or giant-celled forms. Giant cells may occur in either of the first two types, rarely appear as constituting even the major portion of a tumor, and have no special significance except that when abundant their number points to bony origin. Spindle and round cells are capable of direct transformation, one into the other, so that in reality there is one sarcoma which originates from the fibroblasts, either of the adventitia of vessels or of ordinary connective tissue, and that at the outset it seems probable that all sarcoma cells are spindles.

"In this scheme the second subdivision, the lymphoid-celled group, includes leukemia, pseudo-leukemia, and malignant lymphoma (the latter also called lymphosarcoma). All sorts of anomalous cases have been noted, particularly by Kaposi, in which it was impossible to determine the character of the disorder, except that its cells were lymphoid. And that these indeterminate cases which, according to him, may shade into leukemia, pseudo-leukemia or mycosis fungoides. These patients usually die from marasmus, preceded by development of lymphatic abscesses, fungoid tumors, adenopathy, or true leukemia.

"*The So-called Sarcoid Growths.*—The members of this growth have been in dispute since Alibert's classical description of mycosis, or as it is now called, granuloma fungoides—(though he states that not all investigators are agreed that the disease is a granuloma). The class had close relationship on one hand with sarcoma, and on the other with granuloma, consequently with productive inflammation. No infective agent has been demonstrated by culture or inoculation in the causation of any of the group, as yet. The diseases considered under this group are (1) granuloma fungoides, (2) multiple idiopathic pigmented sarcoma, (3) sarcomatosis cutis, and (4) multiple benign sarcoid. Metastasis in internal organs has been reported once in the first, and in one doubtful instance in the second."

He mentions the reports of Malherbe and Monnier of a case in which there were metastasis in the axillary inguinal, bronchial and mesenteric nodes in the breast, lungs, pleura, kidneys, pancreas, uterus, ovaries and heart. But he thinks this case not without suspicion, as in addition to the extraordinary dissemination the authors described "marked leucocytosis," and class it with lymphadenoma.

The condition called sarcomatosis cutis is variously described. Kaposi gives the name to his third variety of sarcoma cutis, the others

being mycosis fungoides and lymphoderma. Fendt asserts that its is a granuloma.

Though I have drawn so freely from these valuable papers it is impossible to abstract either of them and do justice to their merits. A few practical points may be made of possible value to those who render "first aid" to such cases.

First, every persistent case of general pruritus with or without skin lesions should be suspected and if possible kept under observation. Also all lesions in extremities of an indefinite or uncertain character. Unfortunately, so far, treatment offers but little encouragement in late stages.

Arsenic has given best results, and some recoveries from mycosis are reported. Some spontaneous, and others attributed to treatment. Most cases have ended fatally. If treatment is to be effective in any of those conditions, by whatsoever name called, it must be in early stages, before the disease is generalized, whether by systemic infection or metastases. In the absence of more definite knowledge of etiology or pathology, remembering its frequent apparent local origin, it is not an unreasonable speculation, that cases of apparent erythema, eczema, or of the many forms of dermatitis, and successfully treated as such, may have warded off, or aborted a mycosis, or sarcoma cutis just as epitheliomata of seborrhetic origin by degenerate processes, have been arrested by timely treatment.

Obituary.

The Reaper has been busy in the old school in Vienna since the first of March. Besides Kaposi, whose death was noticed in the June number, ADOLPH JARISCH who, it was said, was his logical successor in the chair of Dermatology, and HANS v. HEBRA, who had long since won a place in the distinguished coterie, have passed away. This sad decimation would seem to mark the end of an era, that of the pioneers and of the domination of master minds. It is as true of dermatology as of other lines that this is an age of little men. Certainly it is positive that no man does or can hold the place Kaposi has left vacant, and which he inherited from the elder Hebra. Directly or indirectly, they two taught and influenced every man at work in the specialty to-day, and while Kaposi after Hebra's death became a Bourbon of the Bourbons, it is easily forgotten in view of his noble legacy which is ours as it is the Austrians'. One hundred and ten contributions to dermatology, including six larger works and monographs, extending over a period from 1866 to 1900, represents his life work. If he found it convenient to prefix "noch einmal" to his last article on lichen, it merely served to remind the reader that he of all men had the best right to an opinion since Hebra and he had first set it in its proper place. It is rumored that Riehl is called to carry on the traditions of the school in Kaposi's stead.

The following is a tribute of the New York Dermatological Society:

The New York Dermatological Society at a meeting held April 22, 1902, adopted the following resolutions:

Whereas, Professor Dr. Moritz Kaposi, an honorary member of our society has been removed from us by death; be it

Resolved, That on the death of Professor Kaposi, the Society has lost one of its most eminent members; one whose high professional attainments, scientific achievements and work as a leader have made his name famous through the whole medical world.

Resolved, That our deepest sympathy be extended to his family in their great sorrow, and that a copy of these resolutions be sent to the family and medical journals for publication.

S. LUSTGARTEN, M.D.,
Committee.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

305TH REGULAR MEETING, APRIL 22, 1902.

JAMES M. WINFIELD, M.D., *President*.

A Case of Warty Tuberculosis of the Foot Treated by the X-Ray.— Presented by DR. J. M. WINFIELD.

The patient was a young lad, who had come to him in December with a warty growth on the dorsum of the foot that had been present for about a year previously. The case had received six applications of the X-ray, the treatments being given once a week for six minutes at a time.

DR. A. R. ROBINSON said that the diagnosis was probably tuberculosis verrucosa cutis. With a history of one year's duration and of a gradual spreading from the periphery, this would seem to be the most reasonable diagnosis. The case also suggested blastomycetic dermatitis. About one year ago he had shown to the society a case, which most of the members thought to be one of blastomycetic dermatitis, but it had turned out to be a dermatitis with papillary formation dependent entirely upon pus organisms. For this reason he would not be willing to make a positive diagnosis in the case under discussion without having made a proper microscopical examination.

DR. L. DUNCAN BULKLEY coincided with the views expressed by Dr. Robinson. He believed that the systematic use of the microscope would lead to the discovery of more cases of blastomycetic dermatitis in this city.

DR. CHARLES W. ALLEN accepted the diagnosis, and agreed as to the treatment to be employed. If the X-rays did not work with sufficient rapidity, a caustic paste could also be used. There seemed to him evidence already of a decided effect having been produced.

DR. P. A. MORROW accepted the diagnosis of tuberculosis verrucosa cutis. He thought the case could be cured more rapidly and with greater ease simply by curettage followed by the application of the Paquelin cautery. However, it was well to experiment with the X-rays in as wide a range of cases as possible. As to the combined use of caustic paste and the X-rays, he would say that he had been treating three cases of lupus with the X-rays for some time. One of these cases had also been treated with the galvanocautery, using a small point to destroy the tubercles. The patient had been subjected on two occasions to the treatment almost immediately after having twenty or thirty punctures, and the action of the X-rays under these circumstances was certainly much more pronounced than when applied to the unbroken skin. He thought it might be well to adopt this combined method.

DR. J. A. FORDYCE thought the case could be treated by curetting the patches and then applying the Paquelin cautery or pyrogallie acid.

DR. C. T. DADE thought it was a waste of time to use the X-ray on this class

of cases. The X-ray only dried up the patch; hence it was much better to resort to the use of the curette and the cautery.

DR. WINFIELD said that he was simply using the X-ray in this case experimentally. The boy was feeble-minded and his mother was very averse to all surgical measures. He was aware that it could be more easily removed by the curette. He had made a microscopical examination of the tissue and had found giant cells and the usual picture of tuberculosis.

A Case for Diagnosis.—Presented by DR. SHERWELL.

Mr. C. M., aet. 45, perfect family history, and never been ill himself beyond the usual diseases of childhood.

The present lesions had first appeared about 2 years since, and seemed from description to be eczematous, but not much serous exudation, confined to lower limbs, and chief manifestations not much above knee, began to take on the fungoid, warty appearance, which they now present, about a year since, with considerable edema, reaching nearly to the inguinal fold, and most marked in left leg. Deep indurated patches can be felt, seemingly of lymphatic implication or stasis at least, in lower thigh.

From its general appearance, it had seemed to him that there was a probability of its being mycosis fungoides, though not classical in form or distribution of lesions.

DR. MORROW did not think this represented a phase of mycosis fungoides, as it did not seem to him to present the characteristic features of that disease. Moreover, he had never seen a case of mycosis fungoides in which the disease was confined to the lower extremities; it almost invariably affects the trunk, face and scalp. The trunk was primarily and most characteristically the seat of the lesions of this disease. Regarding the suggestion that the case might be one of hypertrophic lichen planus, he could not accept this view. In many cases of papular eczema lesions were observed which might be mistaken for the papules of lichen planus. He could not say what was the exact nature of the case, though it might be one of eczema exhibiting unusual features because of some peculiar source of irritation.

DR. FORDYCE thought the case was probably not mycosis fungoides, and he was more inclined to think it was hypertrophic lichen planus.

DR. DADÉ said he could not agree with Dr. Morrow on the points of diagnosis of mycosis fungoides. Dr. Fox had kept under observation for a long time a case in which the disease was confined to the lower extremities.

DR. H. G. KLOTZ thought the case presented many of the features of hypertrophic lichen planus, but the original conditions were apparently complicated by a dermatitis, due to some irritant.

DR. ALLEN regarded the case as a lichen planus of the hypertrophic form on the extremities, with a complicating dermatitis from external irritants, such as scratching. He had no doubt that under appropriate treatment for lichen planus, including curettage of the large lesions on the extremities, the man would recover. He would give internally alkalies, arsenic and podophyllin.

DR. BULKLEY said that he had seen such conditions on the leg repeatedly in old cases of eczema. He was sure the ugly masses on the legs would disappear entirely under the use of rubber bandages. He would certainly exclude mycosis fungoides.

DR. A. R. ROBINSON felt very much as did Dr. Bulkley regarding the case. He saw no evidence of mycosis fungoides. The lesions on the elbow could not be diagnosticated from the lesions of lichen planus, but with such extensive

lesions if the case were one of lichen planus there ought to be other lesions characteristic of that disease. He did not think the condition presented by this patient was so very rare in patients having such a poor circulation, with perhaps also an excess of uric acid in the blood. He should prefer to call this an eczematous dermatitis dependent upon some noxious agent from within rather than from without.

DR. BRONSON said that the case was certainly not a typical one of eczema. Though every now and then warty outgrowths were encountered in eczema, it was usually in much more chronic conditions than appeared here. These warts project from a surface that is only slightly infiltrated. He would exclude mycosis fungoides; the inflammation was too diffuse and the tumors too brawny and not vascular enough. It was possible that there was a substratum of lichen planus, but he understood that the itching was not very marked, and he failed to see a distinct lichen planus papule. The papules looking at first glance like lichen planus did not appear on close examination to be true papules at all. A similar condition was frequently seen in a retrocedent eczema. The element of adherent scales, almost always present in lichen planus, was absent here. Again, in the distribution of the eruption there was not the arbitrary character of the grouping of lichen planus.

DR. GEORGE THOMAS JACKSON said that he saw no evidence of mycosis fungoides, as it was too diffused, and not patchy enough, it was entirely too inflammatory to be lichen planus. He would look upon it as a case of papillary eczema with warty outgrowths.

DR. SHERWELL said he was much obliged for the extended discussion and the careful examination of the case. He had taken into consideration the fact that it was never on the head, face or body, and yet he had never seen, in a man of that age and robustness, such an exaggerated nodular condition with so much swelling, and relatively so little itching. This man did, however, have a good deal of stinging pain. He had received practically no medicine; hence drug eruptions could be excluded. Dr. Sherwell said that in his experience he had never met with such large, warty excrescences in eczema.

A Case of Partial Hemiatrophy of the Fifth Nerve.—Presented by DR. E. B. BRONSON.

The patient, Miss McM—, eighteen years of age, presented a supraorbital atrophy of the skin. She stated that the affection had been first noticed about five years ago, following an operation by an orthopedic surgeon on the tendo Achillis. At this time her nervous system was generally in an irritable condition. The lesion on the forehead began just below the border of the hair, slightly to the left of the median line, and gradually extended downward in the direction of the inner angle of the left eyebrow. It had been at its worst a year or two ago, so far as the depth of the depressions and whiteness of the skin were concerned. Some time after the first atrophic lesion was noticed, it was remarked that a similar depression, less in degree, had formed to the left of the other, beginning near the hair, and inch and a half or two inches from the median line, and passing down obliquely towards the inner angle of the eye. At present, the latter depression was perceptible, but not very distinct, while the alteration of contour from the inner one was decidedly marked. There appeared to be no sclerosis of the affected tissue and no cicatrix. At the root of the nose, and just to the left of the median line was a faint scar, which had followed an injury inflicted by a stone when she was a small child.

DR. ROBINSON said he was doubtful about such a fan-shaped atrophy being due to an injury down near the eye.

DR. BULKLEY agreed concerning the impropriety of calling such cases morphea.

DR. BRONSON said that he had not examined the case carefully with the esthesiometer, yet there was apparently no loss of sensibility. The case seemed to be interesting because of the injury in childhood. It seemed to him quite possible that that injury had done some harm to the supraorbital foramen, and that only under the influence of some subsequent trouble had it given rise to a neuritis. He saw no reason why it should not affect the periphery first—indeed, he would think this would be the more likely course.

A Case of Obstinate Psoriasis.—Presented by DR. G. H. FOX.

DR. FOX said he had been surprised to find a case of psoriasis in which a twenty-per cent. ointment of chrysarobin had almost no effect in producing a dermatitis. Various brands of chrysarobin had been tried with like result.

DR. BRONSON said that it had been his experience with cases of psoriasis that did not yield readily to chrysarobin that they would do so when this local treatment was combined with the internal use of arsenic. He recalled a remark of Jonathan Hutchinson that those cases of psoriasis which were not typical in their location always prove rebellious to treatment.

DR. SHERWELL said that he almost always combined the internal with the local treatment in cases of psoriasis. It was certainly most extraordinary that the chrysarobin had not produced the usual effect of staining, etc.

DR. ALLEN said that he had recently shown a case of psoriasis to the society, and had been criticised for the use of the X-rays in that case because, it was said, psoriasis could be so readily controlled by chrysarobin. The case that he had presented had been vigorously treated with chrysarobin and other similar remedies without much benefit, and hence he had used the X-rays. He had continued the treatment with X-rays, and had exhibited this patient last evening before the New York County Medical Association. As he had applied the X-rays to one side at a time, the effect was very striking. He would advise Dr. Fox to try the X-rays in his case.

DR. ROBINSON said he never used chrysarobin except in cases of psoriasis having a few lesions of long standing, and where there was no tendency to new lesions—in other words, he did not regard chrysarobin as a preventive of new lesions. His treatment consisted in an effort to secure a proper degree of alkalinity of the system, and then in giving arsenic and properly regulating the diet. He had always been perfectly satisfied with this line treatment.

DR. KLOTZ said that he had not found chrysarobin uniformly effective in psoriasis. Sometimes even infiltrated patches of psoriasis yield much better to some mild remedy, for instance, a two per cent. salicylic acid ointment.

DR. BULKLEY said that the intense redness in this case would indicate to him the necessity for thoroughly alkalinizing the system. He would never think of giving arsenic to a case presenting as much congestion as exhibited at present by this patient. With regard to the application of chrysarobin he had been using chrysarobin in equal parts of oleum rusci and alcohol painted on the part, and had found it more effective than the chrysarobin ointment alone.

DR. DADE said that in cases of psoriasis in the progressive stage very little could be accomplished by any treatment, while when the disease showed a tendency to retrogression almost anything would benefit it.

DR. MORROW said that he had had under observation a case which showed that the susceptibility to chrysarobin might be marked for a long period, and be finally lost. The patient referred to had been sent to him by Dr. Keyes eight or ten years ago. He had whitened his skin probably half a dozen times in the course of a few years. The reaction of chrysarobin had been prompt, but in another outbreak, occurring a year and a half ago, this patient had used the remedies formerly prescribed without benefit. Six months ago he had returned to Dr. Morrow, and several different preparations of chrysarobin had been tried without effect upon certain patches on the back and knees. There was a band on the forehead and another about the ears, and these yielded promptly to pyrogallol or chrysarobin, while the patches on the back and knees were absolutely unaffected. He had used frequently one drachm of salicylic acid and two drachms of chrysarobin to the ounce without producing any dermatitis. Recently he had obtained better results from *Emplastrum Hydrargyri*. This patient had been thoroughly alkalinized some years ago, and still later had taken arsenic up to the physiological effect.

There was much that was peculiar about the action of chrysarobin. In one case the white patches, following the use of the chrysarobin, were very marked. A year later the chrysarobin was applied to a second patch of psoriasis, and then the white patches that had been left after the first treatment with chrysarobin, appeared, as proved by photographs. These cases in which chrysarobin produced little or no effect were certainly very rare, for, he used this remedy as a routine measure, and very seldom observed this peculiar insusceptibility to it.

DR. FOX said that this patient had had very many methods of treatment, including mixed treatment and a thorough course of the alkalies. Arsenic had been given in full doses, but had exerted no influence upon the course of the eruption. The hands had improved considerably during the past few months, for, at one time they could not be opened on account of the keratosis. The use of rubber gloves had apparently done good. He had used the chrysarobin in both weak and strong ointment, and also as a varnish combined with ichthyol. Ammoniated mercury had also been used locally. As to the permanent change in the skin left after chrysarobin had whitened it, he would say that he had observed a case in which as the edges of the scaly patches began to whiten, a number of other white disks appeared in other places where the skin was perfectly healthy. So far as he could judge, these spots were exactly where the lesions had been made to disappear a year before by the use of chrysarobin.

DR. ROBINSON said that he had made a good many sections of the skin of these patches, and had found that the lower row of cells ordinarily containing pigment no longer contained pigment.

A Case of Disease of the Nails.—Presented by DR. P. A. MORROW.

The patient was a gentleman who had never been troubled with any eruption on his body. About one year ago he noticed a disease of the finger nails. It had involved all of the nails on both hands, with the exception of the index finger. The nails had lost their translucency and seemed to be wormeaten or pitted, as if the hard portion of the nail had been picked out. The nails of all the toes were affected in a similar manner.

DR. BULKLEY regarded this as a beginning eczema of the nails. He believed it often affected the nails alone before appearing elsewhere, particularly in arthritic subjects. It had been claimed by some that most diseases of the nails were parasitic, but this contention had not been substantiated by the presentation of such cases to this society.

DR. FOX said he did not believe that in cases in which all the nails of the hands and feet were affected almost simultaneously that the affection was parasitic in nature, nor did he think such a case could be diagnosed as eczema. He would rather put it down as due to malnutrition of unknown origin.

DR. GEORGE T. ELLIOT mentioned the case of an unmarried woman in his practise who, at the first indication of the climacteric, developed a fissuring, discoloration and breaking of the nails. At the same time a very extensive alopecia areata became evident. It would seem difficult to attribute such a case to parasitic causation.

DR. SHERWELL said he did not think this condition of the nails was mycotic or eczematous. The true explanation, in his opinion, was to be found in an underlying gouty condition. Probably the affection of the nail began with a minute gouty deposit in the capillaries about the nails, thus disturbing their nutrition. He would look for better results from improving the constitutional condition, and antilithic remedies.

DR. BRONSON said that while the condition was commonly called eczema of the nails this seemed to him a decided misnomer. It was not an inflammation apparently; simply an atrophy or imperfect development of the nails of unknown origin. He had presented to the society a more aggravated case of this kind. The nails were blackened and some of them had been shed entirely. This person was now entirely well, having recovered under the use of arsenic.

DR. JACKSON said that the trouble seemed to be dependent upon disease of the matrix of the nail, and the gouty theory formed a good working basis.

Selections.

GENITO-URINARY DISEASES.

A Clinical Lecture on Tuberculosis of the Bladder.—By P. J. FREYER, M.A., M.D., M.Ch. (*Edinburgh Med. Journal*, January, 1902, p. 38.)

Tuberculosis of the bladder is now recognized as a much more common disease than was imagined some years ago. The extended use of the cystoscope and bacteriological research as aids to diagnosis, have brought about the recognition of the comparative frequency of this condition. Primary tuberculosis of the bladder is very rare, and may begin in any part of the bladder, but it is most frequently seen by the cystoscope in its earliest stages on the posterior aspect of the viscus, behind the inter-ureteral bar.

In a secondary invasion of the bladder from without, the disease follows the same laws of invasion as to locality as in primary tuberculosis of that viscus, but in the majority of cases, bladder tuberculosis occurs secondarily to a pre-existing focus in the kidney or genital apparatus. In the descending variety (from the kidney) the bladder is first invaded around the orifice of the corresponding ureter; while in the ascending variety (from the genital organs) the disease first shows itself at the neck of the bladder in the trigone. In the adult male these two sources of invasion are about equally common; but in male children the descending form is most frequent. The bladder in the female is much less commonly affected than in the male.

Infection of the bladder takes place (1) through the blood, (2) by the lymphatics, (3) by extension through continuity or surface, along the mucous membrane from the kidney or genital organs (the most common form), (4) by direct ulceration from the prostate into the bladder, and (5) by infection from the kid-

ney, through the urine. The kidney may be diseased for years without infection of the bladder following. The mucous membrane of the bladder appears to possess considerable powers of resistance against the tubercle bacilli. Congestion, inflammation, or abrasion of the mucous membrane, is probably essential in order to render it amenable to attack.

Dissemination of the tubercle takes place rapidly if the bladder becomes infected by pus microbes, induced by the introduction of septic instruments, or otherwise. The tubercular ulcers, though shallow, as a rule, sometimes eat their way through the whole thickness of the bladder wall, or into the perivesical tissues, causing fistulæ or urinary abscesses, and making their way to the surface in the groins or perineum. This is a rare occurrence. In advanced stages the walls are considerably thickened, and the bladder cavity contracted, and perhaps pouched.

The differential diagnosis between stone and tuberculosis can only be made by sounding or with the cystoscope, or both. The symptoms are about the same. Hematuria is not infrequently the earliest symptom, and it is usually unaccompanied with pain. The hemorrhage may be profuse even with but slight ulceration. It is at first intermittent, lasting from one to three days, the next attack not occurring for weeks or months. These attacks become more and more frequent, and eventually blood is constantly found in the urine. The hematuria is painless when the ulceration is situated at a distance from the neck of the bladder. Once the trigone is invaded, pain and increased frequency of micturition are invariably present. The hemorrhage is rarely so profuse as when there is a growth in the bladder. The pain and frequency of micturition are characteristically not influenced by exercise. The pain is not confined to the penis, behind the glands, as in stone. It extends along the whole canal, and is of a burning or scalding character. With extensive ulceration, pain is constant in the hypogastric region, and is much enhanced when the bladder is disturbed. General cystitis aggravates all the symptoms.

In children, especially in females, incontinence of urine is not an uncommon symptom. It indicates, as a rule, that the neck of the bladder is involved. Loss of weight is an early symptom.

General hygienic and medical treatment is of the greatest importance. The case should be treated on general principles as if the lung or other organ were involved. Urotropin, freely diluted with water, is the most efficient drug for the pyuria. Salol and boric acid are also useful.

In tubercular cystitis silver nitrate is not only useless, but actually injurious. Corrosive sublimate is the most effective remedy to be employed. Solutions of 1 in 10,000 gradually increased to 1 in 2,000 are recommended. One and one-half to 2 oz. are injected through a soft catheter, and allowed to run off several times. Before withdrawing the catheter, $\frac{1}{2}$ to 2 drams of this solution are injected and allowed to remain in the bladder. Local treatment is not to be resorted to, unless the general treatment fails, because the problematic benefits of the treatment are more than counterbalanced by the danger of infection by instrumentation.

For the relief of pain, morphia and belladonna, in suppositories, are most effectual.

The final procedure is cystotomy, preferably by the suprapubic route. In a minority of cases, curetting the ulcers through this opening, with a sharp spoon and rubbing in iodoform paste, have proved successful, but in a large proportion of cases this procedure has failed to arrest the progress of the disease.

A. L. W.

Therapeutic Reports

THE PREVENTION OF OPHTHALMIA NEONATORUM.

In an article on the prevention of ophthalmia neonatorum Dr. Lucien Howe, of Buffalo (*Philadelphia Medical Journal*, January 18, 1902), whose name is so prominently identified with this subject, urges the enactment of laws which will make it compulsory upon the practitioner to adopt some form of prophylaxis against this disease, which is responsible for so many cases of blindness. He cites statistics by Kostling, showing that in 17,000 births where no prophylactic treatment had been employed some trace of ophthalmia developed in over nine per cent., whereas in 24,000 children treated by the Crede method the number who developed the disease was only one-half of one per cent. The Crede method, however, has the disadvantage of always producing some pain and usually more or less conjunctivitis, while in a few instances it has given rise to corneal ulceration. According to the statistics of Potrowski, in 1,030 children treated with a strong solution of boric acid and a ten-per-cent. solution of protargol not a single case of ophthalmia occurred, while slight catarrhal conjunctivitis was observed in only 1.2 per cent. Aside from the numerous favorable reports on the value of protargol as a prophylactic

against this affection by European authors, the drug is preferred for this purpose by many ophthalmologists in this country, including Drs. Alt, Peck, Cheney, Fox, Hotz, Zimmermann, Converse and Todd. In commenting upon Dr. Howe's paper the *Philadelphia Medical Journal* remarks editorially: "If we cannot reach the fons origo of ophthalmia neonatorum, we can at least save the offspring from a life of darkness, and protect the community from a source of burden and expense. That this can to an enormous extent be accomplished by prophylactic instillation need hardly be repeated, and its negligence constitutes a sin of omission that deserves commensurate punishment. The enactment of such a law is feasible, its interpretation obvious, and its enforcement not difficult, provided the accoucheur receives the intelligent support of an intelligently instructed community."

IODIPIN AND ITS USES.

Dr. Blanck¹ writes on iodipin, basing his remarks on experiments personally conducted and on the reports of others. Taken internally, the drug passes the stomach unaltered and is partly split up in the intestines. The greater part is,

¹ *Die med. Woche*, Dec., 1901.

however, absorbed and transported by the blood to the tissues, where it is deposited. Thus depots of iodine-fat are established in different parts of the body, whence the iodine is slowly liberated. A gradual and prolonged action of the drug is in this manner insured. The same circumstance accounts for the absence or mildness of untoward effects, which is one of the advantageous features of the remedy.

Iodipin is given by the mouth in doses of 1 teaspoonful to 1 tablespoonful and more, of the 10-per-cent. solution, thrice daily.

Over and above its therapeutic value, iodipin has been employed for diagnostic purposes, to test the motor power of the stomach. Normally, after a dose of the drug has been swallowed, iodine can be detected in the saliva ten to sixty-five minutes later. If the iodine reaction does not appear in the saliva in the course of this period, a motor insufficiency of the stomach is the probable cause of the delay.

The drug can be administered otherwise than by the mouth—by rectum, by inunction, and subcutaneously.

For hypodermatic purposes the 25-per-cent. solution is to be preferred, and from 1 to 2 drams or more may be injected at a sitting.

Numerous affections have been subjected to iodipin medication, and usually with marked success. Tertiary syphilis yields to it as to no other remedy. In asthma, emphysema, scrofulosis, arteriosclerosis, diabetes insipidus, lead palsies, neuralgias, etc., excellent results have been obtained. The author concludes by stating that the drug is indicated whenever a continuous, prolonged action of iodine on the system is desired.

Dr. Kreibich² reports a case of actinomycosis in a woman of twenty-one. The disease affected the patient's cheek and was cured by local injections of iodipin. After puncturing the characteristic abscesses, an injection of 100 min. of the 25-per-cent. iodipin was given on the first day. A reactive inflammation set in and took two days to subside. On the fourth day another injection of 1 dram of iodipin was given. Later on injections were made at intervals of four to five days, altogether 1 oz. of the remedy being administered. Complete cure was obtained in four weeks. The same treatment had in two previous similar cases effected an equally gratifying cure.

Dr. H. von Hymmen³ has experimented with the remedy in all ocular affections indicating the administration of iodides, including some cases of ophthalmic tumors. Incidentally he has been able to note the beneficial effect of the remedy on other diseases, such as asthma, chronic inflammatory affections of the female pelvic organs, etc.

Several hundreds of patients received treatment in the course of about two years. Many of them owe their improvement to iodipin, the other iodides having been found ineffectual. For weeks and even for months iodipin was tolerated easily, with one exception, an elderly patient of sixty-six years.

Among the disorders found amenable to the new remedy the author mentions scrofulous inflammation of the eye, which yielded to the internal exhibition of iodipin in a few weeks.

Several cases of parenchymatous keratitis due to constitutional syphilis were influenced favorably by the drug. The

² Wiener klin. Woch., 1902, No. 4.

³ Ophthalmol. Klinik, 1901, No. 24.

same may be said of chronic inflammatory conditions of the eyeball without diffuse opacities of the vitreous body. These latter showed themselves very obstinate to treatment, while solitary opacities due to progressive myopia and other causes yielded readily. An old case of abducens-paresis also improved under iodipin medication.

Generally speaking, the author recommends the remedy chiefly in chronic affections, requiring a prolonged action of iodine. In acute cases calling for a rapid action of iodine, iodipin may be given in combination with the alkaline iodides.

ANEMIA AND ITS TREATMENT.

BY DEERING J. ROBERTS, M.D., NASHVILLE, TENN.

Abstract from the *Southern Practitioner*.

Case I.—Gastric Ulcer, Acute. Female, æt. 53 years, school teacher, previous health good for years, was suddenly attacked with profuse gastric hemorrhage, which persisted at frequent intervals for three consecutive days. The loss of blood was alarming, and the amount and her general appearance justified the most unfavorable prognosis on the part of my associates in the case, who gave up the case as hopeless. The hemorrhage subsiding, alimentation by the rectum solely and Pepto-Mangan by the same channel for two entire weeks was resorted to, noting per oris except the least possible amount of ice water or crushed ice to relieve thirst; then a cautious return to gastric alimentation and Pepto-Mangan by the stomach for four weeks more, when she returned to her duties. No other medicines were used other than an occasional hypodermic of morphia during the first

week to allay restlessness and procure sleep.

Case IV.—Bright's Disease. Male, æt. 58 years. Theatrical machinist; a moderate and sometimes a hard drinker. Diagnosis in February last, chronic albuminuria of several years' standing. Amount of albumen in three samples of urine examined, 37, '2, and 33 per cent., together with epithelial casts. Marked anemia and great debility. Was compelled to give up his job before the close of the season. I placed him under treatment, but, finding I was making no headway, I advised him to go to Red Boiling Springs. This his financial condition did not permit. Left off all other medicines, gave him advice as to diet, and ordered Pepto-Mangan (Gude), one bottle. This he repeated from time to time during the summer, and, although not cured, he is much improved. Says that he feels better than he has done for years, is strong, or seems so, and resumed his occupation, and has been steadily employed since the opening of the theatrical season this fall.

Case V.—Chlorosis and Amenorrhea with Dysmenorrhea. School girl, æt. 16 years. Menstruation only occurring at irregular intervals of two or three months since entering her fourteenth year. Pale, anemic, irregular appetite, at times complete anorexia; when menstruation did occur it was very scanty, sometimes almost devoid of color and very painful; headaches, backache, constipation, with nearly all the other phenomena seen in such cases, showing up from time to time. Had been unable to attend school the last two years, though very anxious to do so. Having tried many other measures but with little satisfactory or permanent improvement, I was much gratified at the results from Pepto-Man-

gan (Gude), which I commenced in July last. Her last three periods at intervals of twenty-eight days have been passed with the greatest satisfaction, each one increasing in volume, unattended with pain, and she seems now, from her active and vigorous condition, her appetite, her ruddy complexion, her gradual gain in weight from 76 to 103 pounds, to be well on the way to recovery, if not entirely relieved, and expects to again commence her schooling with the incoming year.

(N. B.—The Breitenbach Co. have recently won an important suit in the Massachusetts Superior Court, protecting their rights in this preparation.)

PINUS CANADENSIS IN SCABIES.

BY OWEN E. FORD, M.D., UDALL KAN.

I used S. H. Kennedy's Extract of *Pinus Canadensis* in the case of two brothers. Each had the same disease, scabies. Deep-seated pustules between the fingers, extending to the wrists. Intolerable itching and excessive heat. One case came to me at once and I used soap and water and then applied ointment. \mathcal{R} Vasoline \mathfrak{z} i, *Pinus Canadensis* \mathfrak{z} i. This case was entirely well in three weeks' time and not a scar or any bad effect whatever. He and I were well pleased. Then came his brother who had been under the treatment of another doctor, but was not improving. He was even getting worse under his treatment. The Doctor told him it was impossible for him to be cured under months of treatment at least, and it might be years. (I admit I told the first brother the same story, as it was a wicked looking case.) I began and gave the second brother the same treatment which I had given the first, with the result of a cure in about three weeks. But the case is badly scarred, deep pitted, etc. However, we are both pleased to get rid of the dreadful disease. Still, I believe had I taken the case at first the result would have been equal to No. 1.

NEW TREATMENT OF LEUCORRHEA AND OF GONORRHEAL VAGINITIS.

BY DR. PH. CHAPELLE, PARIS.

Yeast in the treatment of chronic leucorrhea, and vaginitis due to gonorrheal infection, has recently been tried with considerable success. Dr. Landau of Berlin was the first to apply it locally by injection for troublesome vaginal secretions, and found small quantities produced a rapid and complete arrest of the discharge, after a few weeks.

Murer in France has used it in the same manner in gonorrheal discharges from the vagina, and found yeast most effective in suppressing inflammation of the mucous membranes, which regained their normal color rapidly. In the gonorrhea of men, however it was not uniformly successful. In leucorrhea and gonorrheal vaginitis, there occurs a substitution of a morbid fermentation, for a non-dangerous yeast fermentation, for the yeast-cells (*saccharomyces cerevisæ*) appear to devour the morbid germs, which set up inflammatory conditions.

Backer, who has made a study of the various ferments, is of the opinion that the natural toxins, however altered, may in the treatment of disease be replaced with advantage by ferments in the living state. He considers good health to be one of normal fermentation, and bad health one of morbid fermentation.

Hence, pure ferments like yeast attract pathogenic germs, allow themselves to be penetrated by them and once enveloped, destroy them by a true phagocytosis. D'Arsonval and Charrin have also made a series of investigations on the reciprocal action of microbes on vegetable cellular tissues, and it would appear that in the case of yeast, in its struggle with pathogenic germs, it expends its energy as a ferment, acting consequently by reason of its phagocytic properties.

We see, therefore why the treatment of leucorrhea and other vaginal discharges with yeast, is based on reasonable grounds and it should therefore be tried

in obstinate cases, which do not yield to tonics and the usual local treatment.

The application of yeast in this connection is not convenient owing to its keeping badly, its offensive smell and the difficulty of obtaining fresh supplies, as well as its inconvenient frothy nature, which makes it difficult to be retained when injected. This, however, can be overcome by using the pure desiccated form, known as Cerevisine, which may be exhibited in the form of a pessary of cocoa butter filled with Cerevisine, and placed in position on going to bed, or a paste made up with glycerine of starch, and retained with a tampon of absorbent cotton, or again applied by dipping absorbent cotton in a thin paste of Cerevisine and water. The quantity for application is not important, as it is perfectly harmless, but from one to two teaspoonfuls can usually be introduced and retained in the vagina during the night, which will give more cleanly and comfortable results than injections of brewer's yeast during the day.

DISINFECTION OF THE SURGEON'S HANDS.

In an article read before the Congress of the German Surgical Society, in April, 1901, Dr. M. Blumberg pointed out that as yet no method has been evolved which assures perfect sterilization of the hands of the surgeon and of the skin of the patient. Bacteriological experiments by the author and by Professors Kroenig, Paul and Sarwey have demonstrated that the most efficient method of disinfection at present attainable, consists in the use of mechanical means (soap, water and brush, followed by washing in a solution of a mercurial salt. Among the latter the bichloride has been most commonly employed, but has the decided disadvantages of roughening the skin, and in the not rare instances of idiosyncrasy of producing severe eczema. Moreover, its penetrating power is limited owing to formation of insoluble albuminates of mercury.

To obviate these objectionable features a new preparation of mercury, a combination of sulphate of mercury with ethylenediamine, has been introduced under the name of sublimine. This has been subjected to careful bacteriological tests by Blumberg, Kroenig and others, who found it at least equal in antiseptic power to the sublimate. The fact that it is non-irritating to the skin, however, enables it to be used in much higher concentrations than the latter in cases in which the hands have come in contact with virulent infectious material. Owing to the ethylenediamine in its composition, sublimine penetrates more deeply into the epidermis than the sublimate, and therefore produces more thorough disinfection. Aside from these advantages, disinfection with this new agent is more easily carried out, and does not require the expenditure of time demanded by the older and far more complicated methods. Its manner of use is as follows: The hands are first scrubbed for five or ten minutes with soft soap and warm water. After rinsing they are then immersed in a 1 to 300 sublimine solution (three pastilles to one quart of water as warm as possible, and brushed for about five minutes. The skin at the site of operation is disinfected in a similar manner. The use of alcohol is not required in this method. —*Internat. Jour. of Surgery.*

SKIN-GRAFTING WITH CALLUS SHAVINGS, IN BLOOD.

Mary M.; age 60 years; Irish. Diagnosis, ulcer of leg. Patient admitted to hospital March 3, 1902. She had a large varicose ulcer situated over the tibia, about $3\frac{1}{2}$ by 2 inches. This condition had existed for nine years, and during that time in spite of all treatment employed had never entirely healed. It had been skin-grafted in the old way, three times unsuccessfully. At the time of entering the hospital the patient suffered so severely from pain that at times she

would cry out. She was put to bed, secretions regulated, the ulcer cleaned up by means of a dermal curette, and dressed for the first twenty-four hours with a Thiersch pack. On the morning of March 5th after the surface had been thoroughly cleaned up, a bovine-pure pack was applied and kept wet with the bovine for twenty-four hours.

On the morning of the 7th, I determined to employ grafts secured from a callus on the small toe, in order to demonstrate the technique of this mode of skin-grafting to five visiting physicians. The mode of procedure was as follows: The callus was thoroughly scrubbed up, and the external layers scraped off. Then thin sections of the layers next to the true skin were obtained by means of a very keen razor. Nine of these were deposited on the ulcerous surface. Over these were laid strips of perforated rub-

ber tissue, then strips of plain bi-sterilized gauze saturated in bovine, and a bandage applied. The nurse was instructed to keep the dressings wet with bovine pure. This dressing was removed on the 14th, and it was found, much to the delight and astonishment of the visiting physicians, that out of the nine grafts employed eight were firmly adherent and in a healthy growing condition. The ninth had become displaced and was removed. The wound was now dressed with bovine pure; the dressings being kept wet, and changed once in twenty-four hours. Co-incident with the local dressings, from the outset, the patient had been given a wineglassful of bovine in milk alternating with wine and beer every three hours. On March 24th she was discharged cured, the entire surface having become covered with new healthy skin.—*Modern Medicine.*

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Original Communications.

REPORT OF A CASE OF DERMATITIS VERRUCOSA PROBABLY CAUSED BY THE BACILLUS COLI COMMUNIS.*

BY HENRY G. ANTHONY, M.D., CHICAGO, ILL.,
Professor of Skin and Venereal Diseases, Chicago Policlinic.

THE subject of this report is a case which was shown by me at the last meeting of The American Dermatological Association, as a probable case of tuberculosis verrucosa cutis. No microscopical examination accompanied the presentation of the case, as I had seen the patient for the first time the previous day.

The rapid development of the lesion caused me to hesitate in my diagnosis, hence I was particular to ask a number of the members of the Association if they concurred in the diagnosis, and of these who examined the case with care, all thought it was a case of verrucous tuberculosis, excepting Dr. Frank H. Montgomery, who said that he regarded the diagnosis as doubtful without microscopical examination, and inoculation of guinea pigs, and Dr. John A. Fordyce, who was confident that microscopical examination would show that it was a case of streptococcic dermatitis.

The patient gives the following history. He was born in Ireland, and came to this country when a boy. His father and mother are living and healthy. He has no brothers or sisters. None of his relatives have had consumption. His wife died of some pulmonary disease one year ago. He has always enjoyed good health; during the past six months he has had a cough, with expectoration.

*Read at the fifty-third annual session of the American Medical Association at Saratoga Springs, N. Y., June 10-13, 1902, in the section on Cutaneous Medicine and Surgery.

He is an encaustic-tile layer's helper by occupation. His duties are to wash newly laid tile with 50 per cent. solution of muriatic acid, in which work he is especially skilled.

Three months ago he was required to work overtime, and, becoming very tired, he burned the back of his hand with muriatic acid. The burn was not very severe; he was able to work the next day, and was required to handle tile, which was very dusty. The tile was being laid in the floor of a cemetery vault. He worked on this job several weeks. The dust from the tile penetrated the burn to such a degree that he was unable to wash it clean at night. The burn became painful, and after employing various home remedies he presented himself in the clinic three months after contracting the burn.

On examination, we find symptoms of pulmonary tuberculosis and tubercle bacilli in the sputum. The lesion of the hand is situated at the base of the thumb; it is the size of a silver dollar. Surrounding the entire lesion is an area of redness, studded here and there with dermal abscesses, from which a drop of pus escapes when they are opened. The area of redness disappears, but partially, on pressure. It is one centimeter wide, and gradually fades into the healthy skin. It is of a boggy feel, and somewhat edematous. Inside of this area is a zone of vegetating papillæ, such as occur in verrucous tuberculosis. On squeezing the lesion pus exudes from the apices of many of these papillæ, and the patient experiences considerable pain. The papillæ gradually flatten as the center of the lesion is approached.

The central zone is a fibrous scar.

Within a few days the lesion markedly increased in size, but showed no change in appearance. The lesion was dressed antiseptically, and stimulating applications, such as tincture of benzoin, were applied, and the lesion healed in three weeks' time.

The possibilities of diagnosis were blastomycosis, tuberculosis verrucosa cutis and streptococcic dermatitis.

Blastomycosis could be excluded without difficulty, and we believed that streptococcic dermatitis could also be excluded, because the cases of that disease which had been reported up to the time that this case was observed did not so closely resemble tuberculosis verrucosa cutis as did this case.

Since then Fox¹ has reported a case in which there was a difference of opinion among the members of the New York Dermatological Society as to whether it was tuberculosis verrucosa cutis or streptococcic dermatitis.

We believed that the patient had inoculated the burn with bacilli contained in his sputum, as he was in the habit of wiping his mouth with the back of his hand when he expectorated. Pus obtained by squeezing the lesion was repeatedly examined for tubercle bacilli, with negative results, remembering that in Keys's² case of tuberculosis verrucosa cutis bacilli were found in the pus first squeezed out, but not in that subsequently obtained.

When stained with ordinary stains, a short bacillus was found in the pus in large numbers. No other micro-organism could be discovered. We made cultures from the pus on various culture media, and invariably obtained a pure culture of this short bacillus.

The pure cultures were turned over to Professor Max. Herzog for identification, together with tissue excised from the outer zone of the lesion, for microscopical examination. His report is as follows:

"Cultures made from the pus developed a bacillus which was fully identified as the colon bacillus.

"Histologic Examination.—Pieces of tissue were hardened in Zenker's fluid and subsequently imbedded in paraffin and stained with hematoxylin-eosin; carmin-Gram; eosin-alkaline-methylen blue; acetic acid methylen blue. The sections show an enormous proliferation of the epidermal epithelium. The interpapillary pegs have extended greatly into the derma, and form structures as they are commonly seen in a true papilloma. Here and there these proliferated masses of epithelial cells contain cells in an advanced stage of cornification, arranged in a somewhat concentric manner. These formations, while to some extent like epithelial pearls as seen in skin cancers, are, however, incomplete,

and not at all as typical as the characteristic pearls as seen in carcinoma arising from the stratum germinativum.

FIG. 1.

Fig. 1.—Section through epidermis and derma. Spencer. Prof. $\frac{1}{4}$ in. Occ. 25 mm. Desquamated cornified epithelia. Thickened epidermis, derma with dense inflammatory infiltration.

FIG. 2.

Fig. 2.—Section through derma. Oil. imm. Magnification. In the right upper quadrant an epithelioid cell, with eosinophilic granulation. In the left lower quadrant an eosinophilic polynuclear leucocyte.

“In some places the proliferated epithelial cells contain small abscess cavities filled with leucocytes, mostly polynuclear. Toward the free

surface the epidermis shows a strong tendency at cornification, and detached scales are found adherent to the skin, particularly in places where the epithelial covering has formed crevices or pockets. The derma shows the character of a granulation tissue of an acute inflammatory process. The fixed connective tissue cells have a more or less embryonal type. Many of them have large vesicular nuclei. Some show karyokinetic figures. The cells with the vesicular nuclei may be classified as epithelioid cells. Intermingled with the fixed cells are a large number of densely infiltrating polynuclear leucocytes. Quite a number of the latter contain coarse eosinophilic granules. There were also found epithelioid cells with vesicular nuclei, and with coarse eosinophilic granules. It appears, therefore, that in this process there are present fixed connective tissue cells which have formed or become occupied by eosinophilic granules.

"The derma and the subcutaneous connective tissue are quite vascular. Basophilic mast cells or plasma cells were not found in the tissues.

"No bacteria could be demonstrated at all with Gram's stain. A very few rods (bacilli) were seen in a number of sections examined."

From this report it will be seen that the only micro-organism present in the cultures was the bacillus coli communis.

The literature of the bacillus coli communis makes it possible that this micro-organism produced the lesion.

Brunner³ says: "That the bacillus coli communis plays an important part in wound infection is proven by certain cases of panaritium, phlegmon, and lymphangitis, from which it may be cultivated in a pure culture." He reports the following case: The patient presented himself with a foul-smelling ulcer of the volar surface of the right index finger. This ulcer resulted from a small wound produced by running a splinter into his finger a month ago. The wound was neglected for some time, and he continued to work in spite of pain and swelling of the affected part. Finally he consulted a physician. On examination the volar surface of the thickened index finger was seen to be the seat of an ulcer, which was the size of a franc. Its surface was covered with a dirty gray exudate, and it produced an offensive odor.

Cultures were made from the surface of the ulcer on to glycerine-agar, and showed two different kinds of colonies of micro-organisms; one was bacteria coli communis, and the other streptococcus pyogenes.

Brunner mentions several similar cases reported by other observers, among which is the case of Sevestre, who observed a severe general infection, the only possible source of which was a subungual panaritium. The bacillus coli communis was found in several metastatic lesions,

while in the pus of the original atrium of infection only streptococci were found.

Henke also believes that this bacillus may infect a wound or slight injury of the surface of the body, and that it is not necessary for penetration to occur by the blood channels from an existing intestinal infection.

Bieth⁴ says that typical blenorrhoea neonatorum may be caused by the bacillus coli communis.

From these statements it will be seen that this micro-organism, when found in external wounds, has usually been present in association with the streptococcus pyogenes, and although we could find no streptococci in our case, we would not exclude the possibility of their having been present in the beginning of the infection, and we would not affirm positively on the authority of a single case that the bacillus coli communis is alone capable of producing such a lesion.

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¹ *Journal of Cutaneous and Genito-Urinary Diseases*, 1901, p. 548.

² *Dermatologische Zeitschrift*, Bd. I.

³ *Centralblatt f. Bakteriologie*, Bd. 16, p. 993.

⁴ *Centralblatt f. Bakteriologie*, Bd. 16, p. 482.

⁵ *Centralblatt f. Bakteriologie*, Bd. 27, p. 163.

ON RESORBIN.

By RHEINHOLD LEDERMANN, M.D.,
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AMONG the medicinal preparations employed in the treatment of diseases of the skin, ointments have long played a prominent part. While the number of drugs admixed to the ointments has in the course of time increased immeasurably, the multiplication of ointment bases has fortunately not kept pace with that of the drugs, and only a few of them have gained a permanent place in the dermatological pharmacopeia. The latter group includes one which I introduced to the profession in 1893 after numerous successful experiments, and which possesses a certain interest in different directions by reason of its composition—namely, resorbin. This is a fat emulsion consisting of almond oil, wax and water, combined by the addition of a minute quantity of gelatin; in order to improve its consistency and stability a small amount of lanolin has been incorporated with it. Unguentum leniens, which has long been known but is unsuitable for many purposes on account of its thin consistence, is somewhat similar to this fat emulsion; but in the production of resorbin the paramount object was extreme subdivision by emulsification of the fat globules, so that these should more readily penetrate the openings of the cutaneous follicles and into the dry, partly cornified layers of the epidermis. The views prevailing at the time led me also to expect that the deeper layers of the skin would likewise be penetrated by this ointment base which is especially intended for this purpose, and the idea of an increased absorbability was to some extent responsible for the name given to it. This erroneous assumption is quite pardonable, for only very gradually did the conviction gain ground that an absorption of an ointment base never occurred in the normal skin. However, as resorbin was ultimately intended not for the normal but for the diseased skin, and as the latter does absorb easily, as all authorities admit, the objection raised against the name at the time is baseless, all the more since experience has fully confirmed the ready absorbability of the preparation.

The therapeutically available qualities of resorbin fully answer the requirements that can justly be made *a priori* of a remedy having the composition given above. The ointment, being a fat emulsion, can be

rubbed into the corneous layer and the follicles without energetic massage, so that merely a slight residue of fat remains on the surface. Hence, when the ointment is used in this manner an occlusive dressing is usually unnecessary, and this circumstance is of great value especially in the treatment of visible parts of the body and those exposed to the air, such as the face and hands. Thus, Hahn writes, ("Ueber Resorbin". *Monatshefte für Dermatologie*, 1894, Bd. xix.): "I was induced to try resorbin mainly by the fact that many affections could not be treated with sufficient energy and regularity, so that the curative results did not ensue rapidly enough; e. g., in facial eczema and especially in the acne of young girls. Too much resistance is encountered on the part of female patients who dislike to show themselves with an ointment applied. When a resorbin ointment is properly rubbed in for from one to two minutes it disappears almost entirely (the last visible remnants of fat are easily wiped off with a dry rag) and matters are greatly facilitated. Görl expresses himself to the same effect ("Resorbin, speciell bei der Behandlung der Skabies und Lues." Nach einem in der mediz. Ges. und Poliklinik in Nürnberg gehaltenen Vortrag. *Monatshefte für pract. Derm.*, 1895, Bd. xx.), namely, that resorbin really possesses the property of penetrating more easily into the skin than any other ointment base heretofore known. At the same time he emphasizes the fact that this rapid disappearance from the skin is in part to be ascribed to the large amount of water contained in resorbin.

Owing to this contained water, the remedy acts also as a cooling ointment, whose effect, according to Unna ("Allgem. Therapie der Hautkrankheiten," 1899), is due above all to the evaporation of its water when it is applied to the warm skin. He says that a second cause of the cooling is that such ointments, by reason of the contained water, do not restrain the evaporation of water from the skin to the same extent as do the purely fatty ointments, especially those of firm consistence, so that transpiration continues, though reduced, and contributes to the cooling. Resorbin possesses this quality, relieves itching and allays inflammation, and has therefore been employed with success in all pruriginous skin diseases of nervous or inflammatory origin, applied either pure or in combination with other drugs known to relieve pruritus. As an excipient with extraordinary sedative effect in intense itching of the skin, Joseph ("Ueber Bromocollsalbe." *Derm. Centralblatt*, 1900-1901) recommends bromocoll, a grayish-yellow powder insoluble in water and dilute acids but soluble in alkalis, which is chemically a dibrom-tannin glue and which, added to the amount of twenty per cent. to resorbin, has proved useful in puritus localis, especially genitalis, and

in puritus universalis, also in lichen ruber planus, lichen simplex chronicus, purigo mitis, and the various forms of urticaria.

Unna (*loc. cit.*, p. 848) ascribes the action possessed by resorbin of softening the corneous layer and thus favoring absorption to a small percentage of soap in the preparation—that is, he looks upon the effect as that of an alkali. This view can hardly be concurred in; for, while this ingredient was at first contained in the preparation, it was soon discarded in the manufacture, on account of the irritating effect occasionally observed. Soap, therefore, was no longer present in the preparation that Unna regarded with favor. The above-mentioned action, therefore, can be due only to the emulsified fat in the resorbin, by which the absorption of the most minute globules into the corneous layer is facilitated. At any rate it appears to me of importance in this connection to point out that Unna, who is generally so skeptical concerning therapeutic claims, concedes to resorbin this absorbability—a point, to the discussion of which I shall recur hereafter.

The marked softening of the superficial layers of the skin produced by resorbin shows that the ointment, with or without the addition of other drugs, is indicated in all affections in which it is desirable that the corneous layer be permeated with fat—that is, for the removal of crusts and scales in different skin diseases such as pityriasis capitis and faciei, in crusting and squamous eczema, in impetigo, psoriasis and ichthyosis, also in all forms of dermatitis associated with rhagades. In such cases resorbin acts partly by supplying the lack of subcutaneous fat so as to relieve excessive dryness of the skin, partly by being directly curative.

In most skin diseases, however, we are not dealing with an isolated involvement of the epidermis, but the cutis is implicated at the same time; in many, indeed, the latter is primarily affected and the epithelium suffers secondarily. In these cases simple greasing of the skin with one of the ordinary ointment bases is generally insufficient, and we require the admixture of drugs to produce the desired curative effect. The ointment base then acts as a vehicle for the drugs to be introduced, and of course that ointment base is to be preferred which favors the rapid and reliable penetration of the medicament into the diseased skin. For such purposes resorbin is particularly appropriate, as is shown by the therapeutic results. Thus with the addition of zinc, sulphur, bismuth, tar and other substances, it has proved especially effective in the treatment of psoriasis and scabies, also in subacute and chronic eczema (O. Muller especially recommends for eczema intertrigo in nurslings an ointment containing boric acid 5 gm., dermatol 10 gm., and resorbin 100 gm.; this he advises to be generally employed,

moreover, as a prophylactic against intertrigo in infants). In many cases dispensary treatment could be carried out by this means, when otherwise it would have been impossible.

In the treatment of psoriasis, chrysarobin, pyrogallol, white precipitate and salicylic acid furnish with resorbin excellent ointments that render occlusive dressings largely superfluous. At the same time the effect is more rapid than with ointments having other constituents. Of course, such ointments being readily absorbed, the danger of drug intoxication is somewhat increased with them and therefore it is good practice to reduce the quantity of the active ingredient in resorbin ointments. In scabies, when the skin presents marked irritation, I order a resorbin ointment containing thirty per cent. of Peru balsam; in this the odor of the drug is pleasantly masked. When the irritation is slight, I prescribe a resorbin ointment containing ten per cent. of naphthol or epicarin (Kaposi) and six per cent. of sulphur; with this the patient is annointed four times in the course of two or three days. The after-treatment for the removal of the artificial irritation consists in the application of a thirty per cent. zinc-oxide-resorbin ointment. During the treatment the patients can attend to their business undisturbed, as they are not troubled with the greasy feeling of the skin which is otherwise so common after general innunction with ointments.

In the treatment of scabies when the skin is not very sensitive, Görl employs an ointment composed of sulphur 30 gm., beta-naphthol 20 gm., green soap 50 gm., and resorbin 150 gm., and advises to omit the green soap when the skin is delicate.

Hahn as well as Görl has been able to report satisfactory curative results in herpes tonsurans and parasitic sycosis from the use of resorbin ointments containing appropriate quantities of naphthol and other substances. In the treatment of lichen ruber I have been well satisfied with Unna's zinc-sublimate-carbolic ointment having resorbin as an excipient; this greatly relieves the itching; in the rare cases in which it fails it may well be replaced by the above-named bromocoll-resorbin ointment. In the dressing of well granulating wound surfaces which are beginning to skin over, resorbin forms a suitable vehicle for tumenol, iodoform, silver nitrate and Peru balsam. Strange to say, iodoform, which in many cases we cannot do without, loses some of its odor when mixed with resorbin and is therefore preferred by the patients to corresponding ointments having lard or vaseline for a base. Pledgets of linen or lint coated with resorbin require more frequent changing, as they dry in a short time, owing to the rapid penetration of the fat into the wound.

Resorbin ointments combined with potassium iodide according to

the ordinary formulæ of the pharmacopeia, whether applied to the intact or to the diseased skin, would not be expected *a priori* to produce a marked effect, as the greater portion of the iodide dissolves in the evaporating water of the base, and when the ointment is rubbed in, does not reach the epidermis but remains as a concentrated solution on the skin and evaporates. This fact has been confirmed by Lion in his experiments. On the other hand, in the application of potassium-iodine-resorbin ointments to mucous surfaces we may expect an absorption equal to that with watery solutions, and R. Müllerheim at the Strasburg gynecological clinic after introducing a potassium-iodine-resorbin tampon into the vagina observed the occurrence of violent acute iodism.

As a vehicle for introducing medicaments into the body resorbin in combination with salicylic acid has found application in the treatment of acute articular rheumatism, and in combination with mercury in the therapy of syphilis.

Thus M. Weiss ("Zur Behandlung des acuten Rheumatismus mittels cutaner Anwendung der Salicylsäure." *Wien. med. Presse*, Nos. 48 and 49, 1895) reports the case of a four-year-old boy, whose obstinacy rendered all internal medication impossible. On the fourth day after the cutaneous application of an ointment containing 10 gm. of salicylic acid and 100 gm. of resorbin the child was free from fever, and the swelling of the joints was gone on the eighth day. A subsequent relapse was promptly relieved by the same treatment.

Of most importance is the combination of mercury with resorbin in an ointment resembling the official blue ointment—resorbin mercurial ointment (*unguentum hydrargyri cinereum cum resorbine paratum*). This is a factory product and therefore always uniform; it is placed on the market in $33\frac{1}{3}$ and 50 per cent. strengths. The former is commonly used, the latter only in exceptional instances. For special discretionary purposes the ointment is also furnished by the factory colored red by the addition of cinnabar; this is employed in female and family practice, hence especially for lues insontium. It is dispensed in graduated glass tubes having a movable cork bottom, so that the ointment can be easily expressed by means of a wooden rod accompanying each tube. In the ointment containing 30 gm. each division of the scale represents 1 gm.; in those containing 15 gm., which are intended for children, each division represents 0.5 gm. Hence the patient need only be told how many divisions he should advance the bottom of the tube for each application in order to obtain the amount of mercury prescribed. This method, which Lassar (*Derm. Zeitschrift*, Bd. 1, Heft 4) terms original and practical, has proved to be entirely successful, especially as the residual remnant of the ointment is protected from all

impurities. Mercurial resorbin has a dull gray color, somewhat lighter than that of the official mercurial ointment, and a faintly aromatic, pleasant odor. The microscopical examination of the ointment, made at Hofrath Neumann's clinic in Vienna, shows, according to Silberstein ("Das Quecksilberresorbin, ein Ersatzmittel der grauen Salbe und dessen Anwendung." *Wien. med. Wochenschrift*, No. 8, 1900), that the globules of mercury, contrary to what obtains in the official ointment, are uniformly distributed, their diameter ranging between 2 and 4 μ . As the ointment is very soft, it can be most rapidly rubbed into the skin and even after an inunction lasting but from eight to ten minutes it can be seen that it has disappeared, leaving only a dull gray reflex, but no other fat residue on the skin. This observation, which has been repeated in many places and uniformly confirmed has moreover been proved experimentally by Hugo Muller of Mayence ("Untersuchung über die Einverleibung verschiedener Quecksilbersalben in die Haut." *Therap. Monatsch.*, 1896, No. 11). The reduction of the time of infriktion to one-third of that usually necessary forms, according to Silberstein, one of the most material advantages of mercurial resorbin, which, therefore, may also find suitable application in anemia and debilitated persons, owing to the shorter time of incorporation. Another advantage consists in the lessened soiling of the linen—a matter that rendered a course of inunction with the official ointment an object of disgust to the patients, owing to the filthiness inseparable from it. With resorbin, however, inunction has again come into favor and in many cases is preferred to a course of injections which is not equally well borne by all patients.

The efficacy of mercurial resorbin is absolutely equal to that of the official ointment, despite the shorter time consumed in the inunction. This is borne out by the favorable results of treatment in more than a thousand cases with the ointment in the most different processes of early and late syphilis, affecting the skin and mucous membranes as well as the central nervous system and other vital organs. The symptoms yield rapidly and relapses are no more frequent than usual. In addition I have notes of a number of cured cases treated exclusively with mercurial resorbin, in which the disease was never transmitted either to the wife or to the offspring. The frequent occurrence of gingivitis observed by Crippa, myself and others during the course of inunction can be regarded only as a proof of the more thorough absorption of the mercury by the body; but it may be easily avoided, without endangering the prospect of success, by reducing the daily amount of mercury in the more sensitive patients. Owing to the excellent results of the treatment, Neumann of Vienna was even tempted to shorten the dura-

tion of the treatment with mercurial resorbin inunctions; yet I would hardly advocate this measure, since we must judge of the effects of mercury not only by the immediate results, but in the treatment we always leave in the body a certain deposit of the metal which is to exert an after-effect when the visible symptoms have disappeared. The question which at present is largely discussed in Germany, as to the manner in which mercurial ointments act in courses of inunction, whether by absorption through the skin or by inhalation, is practically immaterial with mercurial resorbin; for in fact both methods of incorporation of the metal are active. The occurrence of absorption through the skin is proved by the before-mentioned investigations of H. Müller. A short time after inunction with mercurial resorbin he found the metal in his microscopical preparations in the form of globules and granules not only between the superficial epithelial layers of the epidermis, but also in the follicles and along the hair shafts to a considerable depth. A portion of the mercury, which is found deposited on the surface of the skin in impalpable subdivision, is taken into the body by inhalation, and this mode of incorporation will be more energetic in proportion as the evaporating surface is larger. For this reason I have always advised to spread the amount of mercurial resorbin required for each inunction over as large a surface as possible. I direct that the ordered quantity of ointment be rubbed in on the first day over an entire lower extremity from the hip to the dorsum of the foot; on the second day over one arm with the adjoining half of the chest, abdomen and back; on the third day over the other lower extremity; on the fourth day over the other arm and the corresponding half of the body. On the fifth day the patient takes a bath and continues the course on the same day. I calculate for the first main course forty inunctions with from 120-150 gm. of ointment; in the later courses, which are carried out according to the Fournier-Neisser plan with intermissions, correspondingly fewer inunctions are required. When pursued in this way a course of inunctions with mercurial resorbin represents an effective, cleanly and convenient method of treatment for syphilis.

Besides inunctions, mercurial resorbin is used in the form of external applications according to Welander, especially in grave pustular syphilides of the skin and for this purpose it is warmly recommended by Joseph in his text-book on diseases of the skin and genital organs. Another mode of application is one introduced by Herxheimer in the treatment of syphilis, the so-called "Einklatschungen," which can be most rapidly effected especially with mercurial resorbin.

With the exception of resorcin which liquefies resorbin, the latter may be combined with all known fats and drugs. In some combina-

tions, the execution of which may safely be left with the pharmacist having the necessary technical facilities, certain additions are required, to which attention has been called by J. Mindes ("Ueber Resorbin als Salbengrundlage," *Pharm. Post*, 1900, No. 28). Thus, in making a ten-per-cent. thiol-resorbin ointment, the addition of a minute quantity of powdered soap is sufficient to produce an elegant smooth ointment. For substances requiring for incorporation previous solution in water, such as silver nitrate, it is advised to use water as sparingly as possible, owing to the water contained in the resorbin. Substances which, though soluble in water, are nevertheless active in a dry state, should always be mixed with resorbin in a dry condition. In some cases, as with ichthyol-resorbin ointments, an addition of *sapo kalinus* is useful. Still, as said before, these technical points concern the pharmacist, who is familiar with them. With the one exception named above, the physician may prescribe any desired combination with resorbin as an ointment base. Only mercurial resorbin is placed on the market ready prepared in graduated tubes. This, like resorbin itself, is manufactured by the *Actien-Gesellschaft für Anilin-Fabrikation* of Berlin.

Use has been made of the following ointments, which can therefore be recommended for the affections named. (Comp. also Dr. R. Ledermann: "Therapeutisches Vademecum der Haut und Geschlechtskrankheiten," 2te Aufl., 1901, Berlin; O. Coblentz.)

1. Acid. salicyl. 2—5—10 gm.
Resorbin ad 100 gm.
M. f. ung. For the removal of squams and crusts in eczema psoriasis, pediculosis and seborrhea.
2. Acid. boric 4 gm.
Resorbin ad 100 gm.
M. f. ung. For eczema, rhagades, chapped hands, etc.
3. Flor. sulphur 10 gm.
Resorbin ad 100 gm.
M. f. ung. For infantile eczema, seborrhea sicca, acne and comedones.
4. Bismuth. subnitr. 10 gm.
Hydrarg. precip. alb. 5 gm.
Resorbin ad 100 gm.
M. f. ung. For chronic eczema capitis et faciei in children (without dressing), also syphilitic papules on the face and head.
5. Zinc. oxydat. alb. 30 gm.
Resorbin 70 gm.
M. f. ung. For papular eczema and intertrigo.

6. Tumenol5—10 gm.
 Resorbin100 gm.
 M. f. ung. For intensely itching eczemas in all stages, also pruritus
 senilis.
7. Liquor. alum. acet.....10—20 gm.
 Resorbinad 100 gm.
 M. f. ung. For artificial dermatitis. Cooling ointment.
8. Olei rusci (vel. Ol. fagi.).....5—10 gm.
 Resorbin100 gm.
 M. f. ung. For chronic infiltrated eczemas and dysidrosis of the
 hands.
9. Bromocoll20 gm.
 Resorbinad 100 gm.
 M. f. ung. For nervous pruritus, lichen ruber and simplex.
10. Naphthol. (vel. Epicarin).....10 gm.
 Flor. sulph.....6 gm.
 Resorbin100 gm.
 M. f. ung. For scabies.
11. Balsam. peruv.....20—50 gm.
 Resorbin100 gm.
 M. f. ung. For scabies.
12. Arg. nitrat.1 gm.
 Balsam peruv.....10 gm.
 Resorbin100 gm.
 M. f. ung. For granulating wounds, and in chronic gonorrheas for
 lubricating the catheter.
13. Europhen1 gm.
 Resorbin20 gm.
 M. f. ung. For eroded balanitis and wounds.
14. Acid. pyrogall. (vel. Lenigallolii).....10 gm.
 Resorbin100 gm.
 M. f. ung. For psoriasis and lupus.
15. Hydr. oxyd. flav. via humida parati.....1—2 gm.
 Resorbin100 gm.
 M. f. ung. For chronic blepharitis.
16. Ung. hydrarg. ciner. c. Resorbino parati (Mercurial
 Resorbin), $33\frac{1}{3}$ per cent.....30 gm.
 Da ad tubam graduatam.
17. Ung. hydrarg. rubr. c. Resorbino parati, $33\frac{1}{3}$ per
 cent.,30 gm.
 Da ad tubam graduatam.
18. Nos. 16 and 17 also in 15 gm. tubes with half gm. divisions.

Book Reviews.

Syphilis, Chancre and Secondary Syphilis. VOUZELLE. Masson et cie, 120 Boul. St. Germain, Paris. Price, 3 francs.

The reason for publication of a work on this subject which the author gives, is its combined brevity and completeness. It is frankly a compilation from French authors from Ricord to Fournier, a scientific and literary hash which is good or bad, as the author is competent to judge, or the reverse. It may be presumed that he is the former and that his book fairly represents the French school. It is almost altogether a clinical study. Little space is given to history, pathogeny and pathological anatomy, none at all to treatment. The supposition is reasonable that there is to be a companion volume treating of late manifestations and therapy. Unfortunately, in life the line between early and late is not clearly drawn, as it is in books.

Vegetable Parasites in Man. E. BODIN. Masson et Cie. Price, 3 francs.

This work has a real usefulness. There is no other which covers this particular field and gives the necessary insight into general characters of fungi infesting human beings. The first part takes up these points, classification, nutrition and pleomorphism, which the author regards as one of the most curious problems of mycology. Besides this, there is consideration of genesis, mechanism and the technic required for the study of the moulds. The second part deals directly with parasites which attack human beings, achorion, trichophyton, microsporon, those of exotic diseases, erythrasma, streptothrix, yeasts, oidium, aspergillus and mucorini. Bodin follows Labouraud pretty closely throughout his treatment of the trichophytions, both in and outside the body. The blastomyces, possibly because there is no case in French literature, is not mentioned. It should be remembered that this is a mycological, not a clinical study.

Society Transactions.

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

Sixteenth Annual Meeting, held at Marlborough House, Atlantic City, New Jersey, April 29th and 30th, 1902.

The president, Dr. William T. Belfield, of Chicago, in the chair.

Officers elected for the ensuing year:

For President, Dr. Paul Thorndike, of Boston, Mass.

For Vice-President, Dr. Edwin C. Burnett, of St. Louis, Mo.

For Secretary and Treasurer, Dr. John Van der Poel, of New York.

For Council, Dr. William T. Belfield, of Chicago, and Dr. James R. Hayden, of New York.

Next place of meeting, Washington, D. C., May 12, 13, 14, 1903.

The Technique of Prostatectomy; Cases and Specimens in Illustration.

—DR. JOHN P. BRYSON, of St. Louis, described the technique as follows: After the usual preliminary preparations, a broad, grooved staff was introduced and a free perineal incision made, opening the urethra just in front of the apex of the prostate. The knife, after entering the groove of the staff, is pushed far enough back to incise the ring at the apex of the prostate. The forefinger follows well into the prostatic urethra and the staff is withdrawn. The finger quickly exposes the prostatic urethra and ascertains whether the vesical outlet can be reached; after which the forefinger of the right hand in the rectum permits a bi-manual examination of the prostate within reach. Guided by the finger, a blunt instrument is now passed into the urethra and made to puncture from the urethral side the most prominent part of the mass, and then the instrument is pushed well into the swelling. On its withdrawal the finger tears its way into the centre of the mass which, even in fibrous prostates, is comparatively friable. The mass is now opened through to its capsule, the finger swept round its periphery without tearing the prostatic capsule or fibrous sheath of the gland. The floor is felt to tear longitudinally. After the lobe has been loosened all around there remains the attachment to the urethra, in detaching which care must be taken not to remove too much of the sides nor any of the roof of the urethra. The hypertrophied lateral lobe is then removed, to do which one has often to go well up behind and beside the neck of the bladder; yet it is possible to do this and keep within the capsule. Very little bleeding follows. The detached mass may be delivered with an ordinary lithotomy forceps, or may be broken up with the finger, or divided with scissors. This process is repeated on the opposite side, after which a median posterior segment remains to be dealt with, which can be usually done by sweeping the finger from side to side, pushing it backwards in such a way as to detach it well up behind the bladder and roll it downward. One may often be surprised to find that he may get behind and excochleate what he had just felt as a pedunculated intravesicular projection, or a growth *en collerette*,

bringing it well down by use of the forceps apparently without disturbing the fibrous ring at the vesicle outlet. The more the detached mass is rolled downwards by pulling upon its upper surface, the less mucous membrane is removed. Usually now the finger may be passed through the ring into the bladder which may be explored thoroughly. The bladder is now irrigated with hot saline solution until the oozing ceases. If the finger be now introduced the floor and the sides of the urethra will be found intact, the latter often hanging loosely against the outer wall or sides of the cavity from which the growths have been removed. A large cavity is made out between the lower part of which and the rectum there is felt a thin wall. Into the lower part of this hinged posteriorly about the ring at the vesical neck is an irregular flap of mucous membrane, which can be pushed back and often made to occlude the vesical outlet. Care must be taken not to double backwards and push this flap into the bladder when the large drainage tube is introduced.

The Use of the Cautery on the Prostate through a Perineal Opening. New Method, with Presentation of Instrument and Report of Cases.—DR. WM. N. WISHARD, of Indianapolis, See page 245, June, 1902.

The Surgical Relief of Prostatic Hypertrophy.—DR. CHARLES H. CHETWOOD, of New York, read this paper from which he found the following personal impressions: Palliative measures should not be persisted in when they fail, after reasonable duration, to produce and maintain an abatement of symptoms. A first infection of the bladder is not alone sufficient excuse for operation unless palliative measures fail to promptly subdue inflammatory conditions. Recurring infection of the bladder or ascending infection of the kidney is sufficient warrant for operative interference. There is a growing tendency toward earlier operation than was formerly practiced. The greater number of cases of prostatic hypertrophy can be satisfactorily reached through a perineal incision. In the large majority of cases, the requirements of any operation upon the prostate consist in the removal of the obstructive area and depressing the bladder opening into the prostate, so that the *bas fond* may be properly drained. In many cases the obstructing area of the hypertrophied gland can be satisfactorily removed through a perineal opening by means of the galvano-caustic incisions. Perineal-galvano-prostatotomy is preferable to the Bottini operation on account of its greater accuracy and lower mortality.

Bottini's Operation.—DR. HENRY H. MORTON, of Brooklyn, presented a case occurring in a patient aged seventy-eight years, who for one year prior to the operation had been complaining of tenesmus and frequent and painful urination, and at the time of his admission to the hospital there was complete retention of urine, an examination revealing 24 ounces of residual urine. At this time the prostate was observed to be $1\frac{1}{2}$ inches in diameter, and the cystoscope revealed an enlarged middle lobe and trabeculated bladder. The urine was acid, cloudy, with a specific gravity of 1016, and showed a slight sediment which contained pus cells but no casts. Bottini's operation was performed, three incisions being made, the anterior one being 2 c.m., the posterior 3 c.m., and the left lateral 2 c.m. in length. Catheterization was necessary until the third day after the operation, when the patient began to urinate spontaneously. Eleven days after the operation micturition occurred every hour during the day and five times at night, catheterization being performed once daily with a withdrawal of three to four ounces of residual urine. One month after the operation the patient urinated six times daily and four times at night and, although the stream was slow in

starting, it was ejected with good force. The cystoscope at this time showed the posterior lobe of the prostate with a cleft in the middle made by the Bottini incision, and the patient continued to be in good general health, being up and about the ward. Subsequently his appetite and general vitality began to fail, and fifty-four days after the operation he died.

A complete autopsy was not permitted, but the bladder was examined and found to be contracted. It contained a small quantity of thick and foul pus; many necrotic areas were scattered about the surface, and a number of small sacculi, one containing a small calculus, were observed. Traces of the posterior incision were very distinct. The interureteral fold of the mucous membrane had been divided, and the middle lobe of the prostate cleft in halves, necrotic areas being visible at the apex of each half. The left lateral incision had not split the prostate and no trace of the anterior incision was visible. The kidneys were not examined but, as previous urinalysis had revealed the absence of casts, the cause of death was probably cystitis, which had been greatly aggravated by the operation. The middle lobe of the prostate was completely divided into two halves. The reduction in size of the prostate following the Bottini operation probably results from the sloughing subsequent to the burning. The difficulties of placing the instrument in a correct position were shown by the fact that the left lateral incision did not divide the left lobe of the prostate, as intended, but only lifted up the mucous membrane covering it, while the anterior incision was not made at all. The obstruction to urination was relieved by a single incision through the posterior median lobe of the prostate, and death did not occur until seven weeks after the operation, at which time the relief was complete. The only reasons he was kept in the hospital until his death was for bladder washing and because he had no home and, had he left the hospital as soon as he was able to go after the operation, his case might have been reported as one of complete retention of urine in a man seventy-eight years of age entirely cured by the Bottini operation.

Prostatectomy.—DR. HENRY H. MORTON, of Brooklyn, reported the case of a patient aged sixty-two years, who entered the hospital suffering from retention of urine, due to prostatic enlargement. Attempts had been made by his physicians to introduce a catheter and a false passage into the prostate had resulted. At this time no instrument could be passed into the bladder and so external urethrotomy without a guide was performed. For three weeks subsequent to this the bladder was drained through a 30 catheter; it was then removed but owing to the fact that the patient could not urinate, it was again introduced and allowed to remain two weeks longer, at which time prostatectomy was performed. The method employed was a suprapubic cystotomy to depress and hold the prostate and the perineal wound was used to shell out the prostate from its capsule. No difficulty was experienced in enucleating three tumors from 1 to 1½ inches in diameter; no hemorrhage followed the operation. Drainage was accomplished through the perineal and suprapubic wounds. Patient did well for three days, during which time the drainage was perfect, but later he developed sepsis and died ten days after the operation. The autopsy showed the suprapubic wound intensely infected; the cavity from which the prostatic tumors had been removed was healthy in appearance and indicated that it would have healed entirely by granulation. The obstruction to urination had been entirely relieved by the enucleation of the prostatic tumors.

Removal in Toto of All Three Lobes of the Prostate by Suprapubic Cystotomy.—DR. CHARLES L. GIBSON, of New York, presented this specimen which was removed from a patient, sixty-two years old, who was admitted to the hospital July, 1901. History of increasing obstruction of urine for past six years. Urine frequently dribbles away. Examination by rectum shows a considerable degree of enlargement of both lateral lobes. There were 15 ounces of residual urine obtained on several occasions. Moderate cystitis. No evident kidney lesion. Prostatectomy by the Alexander method was undertaken, but the first step, however, revealed the bulging of the prostate into the lumen of the bladder so distinctly that he determined to remove the enlarged portions by this direct approach. The vesical mucous membrane was incised over the urethral orifice, and he then found that his finger could easily be swept all around the prostate; so, in a few seconds, he brought out the whole prostate *en masse*. The urethral outlet must have been avulsed, but of this he was not aware, so the prostate was simply shelled out without any force and without much bleeding. The operation was completed by adding a perineal boutonniere for drainage. The result promised to be favorable as there was no reaction. On the fourth day the dressings were changed, the bladder washed out, and the patient's condition appeared to be admirable, with a normal temperature and a free secretion of urine. Yet, six hours later, the patient died without any particular manifestations. No autopsy was permitted.

The case was presented, not to recommend that the prostate should be removed *in toto* with the necessary drawback of destroying the urethral outlet, but for the purpose of emphasizing how easily the prostate, or portions of it, can be removed without destruction of tissue or hemorrhage provided one clearly enters the essential line of cleavage.

DISCUSSION.

DR. EUGENE FULLER, of New York.—During the past year and a half I have performed twelve perineal prostatectomies. I do not mean by this that I have given up the suprapubic method because I have done more than twelve by that method in the same time. Out of these twelve cases I have had one death, the patient dying of delirium tremens. The oldest among these patients was a man of eighty-one years of age, with atheromatous arteries with much infiltration of the arterial coats shown at the wrists and in the temporal regions. I removed the prostate entirely through the perineum. At the time of operation I knew my patient had a stone in his bladder which I intended to crush but I had no chance of doing so through the perineal opening, as the lithotrite I had proved of insufficient strength. It was an extremely large mulberry-shaped calculus, made up of oxalate of calcium, and I thought there would be too much danger of damaging the tissues if I attempted to drag it through the perineal opening; therefore, I thought it better to make a suprapubic opening, which I did. The suprapubic wound gave me no trouble at all. Another one of these cases had tuberculosis of one lung in a late stage, and as it was not deemed advisable to administer a general anesthetic, spinal anesthesia was employed. This patient recovered well from the operation and the anesthesia, but died six, seven or eight months later of progressive tuberculosis.

Regarding the choice of operation, I think that the size of the prostate is only one of the points that should enter into our consideration. I think you can get

out a large prostate by breaking it up and removing it through the perineal opening, but I do not think it is always the wisest plan to attempt this. If you are dealing with a man thick of body, even if he has not a large prostate, you may have difficulty in reaching the prostate through the perineal incision; of course, one might do the perineal operation and cauterize, but that is not really a prostatectomy.

In reference to hemorrhage following prostatectomies it is said that there is less hemorrhage following the perineal operation than after removal of the prostate by the suprapubic route. You may have hemorrhage at times after either operation. In making a choice of operation the condition of the bladder should be carefully studied. Suppose you have a man who has an atonic and distended bladder, or one markedly sacculated; in such a case I think that the operator who would try to do a perineal prostatectomy would be doing foolish surgery. In such an instance clots would probably form in the bladder and remain there, perhaps, necessitating a secondary suprapubic cystotomy to dislodge them, thus averting a death from hemorrhage and vesical tenesmus. In cases of atony of the bladder, or hypertrophy of the bladder walls complicated with sacculaton and with vesical hernial protrusions, I do not think it is well to approach the prostate through the perineum even though one can get it out easily by that route.

Many times, after prostatectomy, the bladder needs a long period of rest before resuming its function successfully. To get such rest long continued drainage is essential to enable it to regain strength and undergo such a change as will permit it to expel the urine. Many patients cannot stand the perineal tube for a long time, and from some it must be removed at the end of a few days. If the perineal tube becomes troublesome it has to be removed even though the condition of the bladder, the renal pelves and kidneys demand a long continued drainage; whereas suprapubic drainage can always be continued indefinitely. So that, in those cases where you have, for instance, a large prostate which can be removed by the perineal route it may not be the wisest procedure. On one occasion I had an extremely large prostate to deal with, and in making the attempt to get it out through the suprapubic route I found that an old attack of peritonitis had so bound down the peritoneum that I could not expose the bladder without opening the peritoneal cavity. I had consequently to close the suprapubic opening and go in through the perineum. I split the prostate in two pieces and delivered them with a pair of curved forceps which grasped the pieces in the same way as obstetrical forceps grasp the head of an infant in delivery.

With reference to the use of the cautery through the perineum, I have not had any personal experience. After opening the perineum I should naturally prefer directly removing an obstruction to leaving it in situ and cauterizing it. I have enjoyed the papers of Dr. Chetwood and Dr. Wishard. Certainly two of Dr. Wishard's cases were very old, one seventy-eight years, the other eighty-five years. The oldest I have operated upon by enucleation was eighty-one years of age. In such an elderly individual as one of eighty-five if cauterization showed itself to be a surgical ordeal of less severity than removal it might be preferable.

DR. FRANCIS S. WATSON, of Boston.—It is always interesting to watch the swing of the surgical pendulum and the papers we have just had the pleasure of hearing are a good example of its movements, for they have brought it back to almost the same point from which we set out about fifteen years ago, as may be seen by the view which I expressed in 1888 before this society in the follow-

ing words: "Anatomically two-thirds of the cases are operable through the perineum. Clinically the perineal operations are the safest. The inevitable conclusion from these facts is this: In a given case, open the membranous urethra, put in your finger and explore. Twice out of three times, the operation can be completed by this route. In the other third of the cases, the long perineal distance, or the form and size of the median enlargement, will make the suprapubic operation necessary. When this is the case proceed to do it at once, or later according to the patient's condition." It was pointed out in that same communication, that *no one operation* was suitable for all cases, and that cases in which there were moderate size, more or less pedunculated, median enlargements, or bars, could be treated through the perineal opening by snare or galvano-cautery instruments, and an instrument of the later variety which I had devised, was described and figured. From that point we were led by the advocacy of our President, Dr. Belfield, by McGill and Atkinson of Leeds, and others, to the increasingly frequent use of the suprapubic method, then by way of Alexander's method of removal of the gland through the sides of the deep urethra, combined with a suprapubic cystotomy as an aid to so doing, back to the point where we began, if we may judge from the tenor of these papers read here to-day, which may be taken as a fair index of the best judgment of the American judgment at this time.

Such further experience of the radical operations as I have had since that time when we first discussed this subject, has brought with it certain pretty definite convictions which are these: (1) That in practically all cases in which the removal of the whole of the gland is undertaken, no other instrument than the tip of the finger should be used, the exceptions are those in which enucleation *en masse* or of the whole of each lobe separately is impossible, because of the intimate connection between the gland and capsule, and in which they have to be removed piecemeal; in such condition one or another of the variety of instruments may be needed to do the operation, otherwise and, as a rule, there is much less danger of tearing through the capsule, or into the rectum when the finger is used and one can tell just what one is doing. There is almost always a line of natural cleavage at the line of the junction of the enlarged lobes with the bladder and urethral floors, along which the finger tip easily makes an opening through the mucous membrane, and allows it to reach the gland itself, and begin the enucleation. (2) I cannot see the advantage to be gained from removing the gland from the urethra, in any operation which also includes, as does Alexander's, a suprapubic incision of the bladder. If the bladder has been opened above the symphysis it is far easier in my belief to enucleate or to do any other method of removal from within the bladder than it is from the urethra. The urethral opening, is used of course, while doing the former as a road by which to aid in the removal from the bladder, and secure more efficient drainage afterwards. (3) I believe it to be very important to avoid tearing the capsule and thereby risking injury to the prostatic plexus of veins. I do not happen to have had a serious hemorrhage in any but one case of prostatectomy, and that arose from the above source. I have never seen any hemorrhage of consequence come from the veins of the inner aspect of the neck of the bladder which Dr. Bryson speaks of as being liable to occur. (4) I do not think the cystoscope is of much value in these cases. It is difficult to pass, sometimes impossible. It informs us only of the size and form of the intravesical projections, and tells

nothing of the extent of the enlargements in other directions, which are the larger portions of them and the more important often.

I have been rather surprised to hear a number of surgeons speak of the cause of death after the radical prostatic operations as if they did not understand its nature and then describe a condition which is as clear as any clinical picture is of renal insufficiency. Renal insufficiency is the cause of death, I believe, in the majority of these cases after operation. It has been so in by far the largest part of those of which I have had the opportunity to have personal knowledge. Septic infection is responsible for most of the remainder and, in the majority, pulmonary embolism figures rather notably.

With regard to Bottini's operation and its various modifications the criticism I have made has been directed chiefly to the failure by some of those who advocate it most unreservedly, to recognize and admit that there are many cases to which it is not applicable, and that its appropriate field is in those in which there are symmetrical unilateral or bilateral enlargements only, or a median lobe hypertrophy of moderate size or a bar at the neck of the bladder.

Limited to such cases as these it is doubtless capable of giving good results both immediate and, so far as we may judge, in many cases remote as well. Its defect is that it does not remove the gland, if that is a defect. I cannot say that this is an established fact, however. Bottini's is not, as some would have us believe, an operation without danger. It is growing in popularity at this time, and must be recognized as a method that should have a more extended trial by all of us, when the conditions are appropriate.

DR. GEORGE CHISMORE, of San Francisco.—I feel some modesty in taking the attention of this society in the discussion of this topic because I have occupied such a conservative position with regard to it. During the course of thirty years I have seen many surgical procedures advocated for the relief of this condition and, for the most part, they have been disappointing in their results. But of late, it seems to me, we are reaching a point wherein I shall have to change my views upon this subject entirely, and that the whole surgical world is headed in the right direction, *i.e.*, perineal prostatectomy.

Hitherto, by proper selection of catheters and their use with regularity, always emptying the bladder with the instrument when there is call to micturate, I have been able to offer a fair share of relief to those applying to me for the troubles resulting from senile hypertrophy of the prostate gland, but, at best, the catheter life is a life of slavery.

I have had the opportunity of observing the after results of many cases of surgical interference with senile hypertrophy, but until lately they have been disappointing. I have seen some cases of combined suprapubic and perineal prostatectomy, notably such cases as Dr. Fuller referred to where all was gained that could be anticipated.

And I have had an opportunity of observing eight cases of perineal prostatectomy performed by Dr. Goodfellow, of San Francisco, who employs a very simple method. The only instruments he uses are a scalpel, a staff and vulsella forceps. His mode of operating is as follows: He places his patient on his back with the thighs strongly flexed upon the chest; upon this position he places much importance; he simply makes a perineal median incision, introduces the staff, opens the urethra and then, with the finger, proceeds with the greatest ease to enucleate lobe after lobe of the prostate. I do not think that more than twenty minutes were taken in the actual process of enucleation and, in each case,

he removed the prostate entirely. In one case, in which I was permitted to introduce my finger, I found the characteristic inter-ureteral bar, the size of a chestnut. After loosening the prostate he made pressure from above upon the prostate and, with the volsella and the finger, he enucleated the entire prostate with the greatest ease, peeling out the inter-ureteral bar as well. All of these eight cases were bad ones, occurring in old men, two being above eighty years of age, and there were but two deaths. In one of these eight cases, a man who had been under my care for years there was a small encysted stone which I had never been able to remove. After the removal of the prostate an attempt was made to remove the stone by the perineal incision but it failed; he then made a suprapubic incision and with much difficulty took out a stone that was not larger than a filbert. It was firmly encysted. This patient died 17 days after from the effects of infection of the abdominal wound. The post-mortem revealed the prostatic urethra nearly well. The prostatic operation had nothing to do with the man's death. In the other case, a man above eighty years of age, had an opening made into the rectum during the operation and he lived thirty days. The post-mortem revealed the wound to be closed but the patient had an abscess of the gall-bladder. All the other of the eight cases recovered. I have had under observation two cases, one of whom was operated upon ten years ago, and the other seven years ago. In the first case the man stated that up to the time of the enucleation of his prostate he had been in miserable health for many years; after the operation he recovered entirely and regained his health. Upon examining this patient there was found, *per rectum*, a growth thought to be malignant, occupying the site of the removed prostate. An operation was advised immediately, the perineum was opened and, in place of a malignant growth, there was found a large collection of small uric acid crystals at a point where the urethral floor had been destroyed; one ounce of these crystals was scraped out. He made an uninterrupted recovery.

Dr. Goodfellow was in the habit of passing a large straight sound through the perineal cut and also washing out the bladder daily; subsequently he dropped that plan entirely. Now, after enucleation of the prostate, in two or three days, he permits the man to be up and about the ward. Urination via the penis begins about the fourth day and the patient is soon well. In another patient upon whom he operated four months ago the patient urinates every eight hours during the day and but two or three times at night.

I think the time will come, and very soon, when we can say to a patient that the prostate, in such conditions, can be removed with great benefit.

DR. CHARLES H. CHETWOOD, of New York.—I have but little to add to the discussion. Prostatotomy is a classical operation first performed by Mercier through the urethra. The occurrence of severe hemorrhages in some cases led to the introduction of the Bottini operation. Perineal prostatotomy is an evolution of the Mercier operation, as is the Bottini technique, and perineal galvano-prostatotomy is an evolution of both kinds of operation. I do not think that it is an operation applicable to all cases, but the cases related by Dr. Wishard and myself bear good testimony as to its worth in many instances. I cannot help but feel that future experience, better technique, and a better appreciation of what can be done with the galvano-cautery will lead to the more extensive use of the cautery operation through the perineum. Among the advantages of this method are rapidity and despatch in operating and, also, the drainage that is instituted. Any instrument which complicates the operation and which prolongs

it is rather undesirable. The instrument of Dr. Wishard is ingenious but rather unwieldy. Little advantage is to be obtained from a cystoscopic view of the prostate while operating; digital investigation is far better.

DR. JOHN P. BRYSON, of St. Louis, expressed gratification with the thorough presentation of the subject of prostatic surgery; and was particularly interested in the presentation by Dr. Chetwood of the galvano-caustic prostatotomy. He remarked, that we were now operating with more confidence even in those cases presenting stigmata of senility with arterio-sclerosis. Prostatectomy should always be considered a capital operation, and one not to be lightly undertaken. The post-mortem findings, presented by Drs. Morton and Gibson were especially interesting, because they were actual demonstrations of what might be accomplished by galvano-caustic prostatotomy and perineal prostatectomy. He was surprised to hear it remarked, that the pathological changes in the bladder, in association with prostatic-megaly, had not been sufficiently dwelt upon in his paper, since he had devoted several pages to the discussion of this subject.

He did not know whether he understood Dr. Watson in regard to the influence of intra-vesical prostatic projections. He had expected to be criticized when he expressed the belief, that intra-vesical projections do not, in his observation, produce urinary obstruction to the degree heretofore believed. In one of the cases reported by him a projection, passing beneath the vesico-urethral ring and jutting into the bladder, had been removed without benefit to the patient, who was subsequently cured by an epicystotomy and drainage. He believed the epicystostomy should, in these cases, precede the perineal enucleation, and he had declined to do prostatectomy on some patients, who had refused to submit to the preliminary operation. The drainage that follows on epicystostomy is better than that which follows the perineal incision.

He agreed with Dr. Fuller, that prolonged drainage by the perineum could not always be done on account of the irritation about the vesical neck, producing cramps, requiring the withdrawal of the drainage tube, or the use of large doses of morphin. In some of his cases he had removed the perineal drain as early as six hours after its introduction, because of the vesical tenesmus. His experience accorded with that of Dr. Watson in regard to the use of instruments—a knife, a grooved staff, a Politzer's bag with a catheter, a blunt instrument for puncturing, are all he now requires; the enucleating finger being the chief instrument. Even in the case of fibrous prostates there is no difficulty in shelling out with the finger and delivering through the perineal wound. He did not believe that many of these overgrowths are separately encapsulated, but that they all begin as adeno-hypertrophy with subsequent fibrous development. It is not difficult to remove this fibrous tissue, and yet keep within the outer rim of the prostate. By doing this the dangers of sepsis, septic phlebitis, embolism, etc., are best avoided.

His work seemed to demonstrate that the real urinary obstruction is nearly always found in the anterior part of the prostatic urethra. He did not see how it was possible to press the vesical outlet to within reach of the enucleating finger without first removing some of the anterior portion of the hypertrophied gland-tissue; but he emphasized the fact, that when enucleating from below, the vesical outlet often sunk down to within reach of the finger in the perineum, without suprapubic pressure, and for this reason, as he had stated in his paper, he always deferred incision into the suprapubic space until the latter part of the operation.

Presentation of Specimens and Models of Hypertrophied Prostates and Their Bearing on the Operative Treatment of that Condition.—By DR. BRANSFORD LEWIS, of St. Louis. See page 293, July, 1902.

DISCUSSION.

DR. FREDERIC R. STURGIS, of New York.—The reading of Dr. Lewis' paper offers me an opportunity for suggesting that it is well to remember the importance of the prostate gland in its relation to the propagation of the human species, and that its absence, either by accident or operation, may tend to render a man sterile. The prostatic secretion has been found to be essential for the vitality of the spermatozoa for, without this prostatic secretion, the semen is no longer fruitful; the removal of the prostate and the ejaculatory ducts would, therefore, interfere with the normal secretion of the parts. Many experiments have been made which show that, in a large proportion of cases where the prostate for purposes of experiment has been removed, efforts to impregnate the female were fruitless. I, myself, emphatically protest against this wholesale removal of the prostate, and I think that in the future we shall regard our present surgical action much in the same light that the wholesale removals of uteri and ovaries of former days are at present regarded. We should, therefore, endeavor as far as possible to preserve the prostate and, if necessary, to perform an operation, not to make it radical, but partial, and perhaps the Bottini operation would, in many cases, be a good substitute for removal.

DR. EUGENE FULLER, of New York.—The models shown by Dr. Lewis are certainly very interesting and do the author much credit, but I do not think one could really show the different forms of prostatic hypertrophies in any one hundred such models. If you have 100 cases for prostatectomy certainly 75 per cent. of them will present something new. Some hypertrophies are very grotesque; I remember one in which the entire obstruction was due to a prostatic finger which grew out from the back of the upper part of the prostate, fell down over the bladder neck, and so was sucked into the urethral outlet as to occasion retention. No difficulty was experienced in passing a catheter in this instance, and no evidences of any hypertrophy could be obtained by rectal exploration. A great many other curious instances which have occurred in my experience could be enumerated.

Another point one might infer from the paper was that in operations for the relief of prostatic hypertrophy there is to be expected much doubt as to the improvement which may result. In my experience that need not be. I feel from my results warranted in the assurance of a good result barring the risk of mortality which is associated with the operation itself, the patient being able to urinate freely, and to completely empty the bladder, although he may not possibly at first have perfect control over the sphincter, the symptom of which is that on much exertion with a fairly full bladder he may lose a little urine.

I have in mind one case, an old man, whose prostate was in a condition of fatty degeneration and deliquescence. At the time of removal, I thought it might be cancerous. There were several cavities in it. He was 74 years old, with changes showing old age, such as the *arcus senilis*. Since the operation this patient has never been able to walk around without a dribbling of urine; yet at night he can hold it perfectly well. I do not remember another case where any marked degree of dribbling has persisted. All of the others have obtained good

control over their urine immediately after operation or at the latest within six months. I remember but one case who used the catheter after I had performed a prostatectomy. This patient had a tubercular abscess at the periphery of the prostate and, after the operation, perivesical suppuration of a tubercular nature occurred which had to be drained. After leaving the hospital the wound healed and the bladder was so bound down by a pericystitis that it could not contract sufficiently to expel its contents. The man lived two years after the operation.

Dr. Lewis referred to one case where an operator instead of attempting to relieve a vesical tenesmus due to prostatic obstruction which had caused a hernia operated upon the hernia. In this instance if vesical drainage had been established the hernia would, in all probability, have ceased to give trouble while no good and probably bad would result from operating on the hernia and leaving the cause for it. Such was the result in the case mentioned. The same reasoning applies to rectal prolapse and hemorrhoids similarly caused.

DR. F. TILDEN BROWN.—Three things suggest themselves to me in connection with Dr. Lewis' paper. In the first place he has assembled a most instructive collection of specimens of the various prostatic hypertrophies. In the second place he has done great service in showing that no one method is always the best when attempting to rid patients of such obstructions. In the third place he has failed to show us *how* to know in advance just which one of these forms of annoyance we have to deal with. It is easy to suggest that we should learn more about the nature of these obstructions before we approach them surgically, yet it is another thing to gain accurate knowledge upon this point. As said by Dr. Watson the use of instruments is often unsatisfactory; it is unnecessary to state *why* before this audience. In thirty per cent. of the cases cystoscopy is disappointing. Again, when we hope to determine the best way to handle these cases it is most important to know what sort of kidneys the individual possesses as well as what sort of obstruction the bladder is embarrassed with. The opportunity of gaining direct evidence by examination of the urine as passed voluntarily, is not very accurate. In a marked cystitis there may be a deal of albumin, and while the presence of casts tells a good deal, some faulty kidneys do not manifest interstitial nephritis and pathological conditions by the shedding of casts. If it is difficult to learn the nature of the prostatic obstruction by the cystoscope it is doubly difficult—practically impossible—to secure the separate urines by ureteral catheterization in the usual way. It occurs to me that where there is good excuse for doing a suprapubic incision to meet some emergency, this should be made use of, at the same time or subsequently, for the introduction of the cystoscope with which to look down directly upon the nature of the prostatic hypertrophy, or new growth. Moreover, if the conditions are favorable by air or water distention, one may introduce the ureteral catheters and get the urine from each kidney. I have recently had an opportunity to examine two cases of enlarged prostate through the suprapubic opening and to learn a great deal about the conditions present, conditions about which I would have been unable to inform myself by the introduction of the cystoscope through the urethra. In one case the enlargement was pear-shaped, the urethral catheter entered the bladder with ease and was seen to protrude at the apex of the pyramid, just as if it were the stem of the fruit. The cystoscope looked down upon and well beneath the tumor, revealing its exact relationship to the bladder beneath walls and neck. Why retention had been complete before epicystotomy it was easy to appreciate. In any position of the patient the urethro-vesical

aperture was well above a four or five ounce water-line, and by the time enough urine had accumulated to reach the opening, expulsive efforts upon this fluid collar surrounding the pyramidal tumor must have tended only more to close its outlet and lumen.

DR. J. P. BRYSON, of St. Louis.—In one of the specimens shown by Dr. Lewis, the one with the small projection jutting into the bladder from above the urethral outlet, he thought a microscopic examination would be required to differentiate between a hypertrophy and some other form of growth. This specimen alone would indicate the impossibility of laying down hard and fast rules as to how one should proceed in prostatectomy. He had been able in two cases to demonstrate that the entire prostatic overgrowth was from the superior aspect of the urethra and that it pushed the bladder down close to the rectum. In attempting to reach this the peritoneum was opened and the suprapubic operation had to be abandoned. He had seen nothing similar to the specimen presented by Dr. Lewis. It was conceivable that extensive hypertrophic growths anterior to the urethra were due to a congenital anomalous course of the urethra passing through the lower part of the prostate leaving the gland structure chiefly above instead of below and laterally. His cases resembled a remarkable instance, figured by Quain in 1872, and refigured and presented before this Association by the late Dr. Stein in 1874. In none of the post-mortem specimens presented here, did he think that pedunculation was so great as to render impossible their removal by the perineal route, or make necessary an epicystotomy. He considered the question of urinary obstruction by an intravesical growth as being of the highest importance. He had opened suprapubically 64 bladders in prostatics,—if he included some that had been opened subsequent to a perineal prostatectomy, the number would be 68,—but in none of these cases had he ever been able to convince himself that he had to deal with a growth that would act as a ball-valve. So far as he could observe there was no urinary obstruction in these cases; since in all of them he could pass his finger through the vesico-urethral ring well down into the prostate.

The two cases cited here by Dr. Lewis confirmed this opinion. In those cases of intravesical projection *en colerette* he did not know how much the Bottini operation could accomplish. In one of the cases cited, when the bladder was opened above, the finger passed easily into a *bas fond* and from this could be pushed through an opening, a round hole, in the posterior part of the projection as far as the second joint. This appeared to be the urethral outlet, but it was not so; for on withdrawing the finger and passing it down the anterior vesical wall, it entered the true urethral outlet, which was in reality gaping sufficiently to permit the finger to pass well down into the prostatic urethra without distention, the opening in the *en colerette* projection would easily admit a lead pencil. It seemed to him that the boring of the hole through the intravesical projection entirely removed any urinary obstruction, for the flow through it was easy. He has been unable in any of these cases, even by the use of considerable force, to double down this intravesical projection in such a way as to occlude the outlet; so that he has been forced to the conclusion that these intravesical projections do not offer so much a urinary as a circulatory obstruction, and that we find the real urinary obstruction further down the urethra.

In the second case shown by Dr. Lewis there is a nipple-like projection from the anterior as well as the posterior part of the vesical outlet, in the center of which is the opening to the urethra. He could not see how, when the entire

prostate was removed such a condition should be left; though there are doubtless many surprises awaiting us; and it was equally difficult to see how the electro-cautery incision through this failed to relieve the urinary obstruction. But since the picture has been made from a clay model, representing the impressions gained during the course of an operation, the *personal factor* may have entered to a considerable degree. He was sure Dr. Lewis would not object to this criticism, especially after he had himself brought the question of the personal factor so prominently forward in his own paper.

But even without this it still remained a question in his mind whether that projection prevented the patient passing the urine as much as the condition of the bladder prior to the prostatectomy. This patient has been "eight years in catheter-life" and epicystostomy with subsequent drainage may have had more to do with relieving the vesical atony than the removal of this projection, as had been shown in one of the cases reported by him. Therefore he was quite convinced that it was the removal of the projection which cured the patient.

DR. EDWARD MARTIN, of Philadelphia.—I have noted with amazed delight the cheery willingness with which my colleagues remove prostates, and have experienced a sense of unworthiness at my own idleness in the field where they have been so busy. It is with shame that I confess to an experience of not more than six cases, all of whom recovered from the operation and were relieved from their symptoms. This limited experience leads me to believe that the operation of prostatectomy at times is difficult, bloody and dangerous, and should be employed only when the catheter has failed to give relief completely. It seems, however, that such a conception savors of old-time surgery, and that from the period when a patient begins losing his parabolic curve the modern surgeon should whet his knife.

I believe with Dr. Lewis that there are various ways of treating an obstruction due to prostatic enlargement, and that Bottini's galvano-cautery may be, in selected cases, the safest and easiest method of accomplishing a cure.

In quiet old Philadelphia some of us still perform vasectomy, at times with results quite equal to those obtained by the most radical removal of the prostate gland. In cases characterized by violent vesical tenesmus, with difficulty and pain in passing the catheter, accompanied by all the symptoms of acute cystitis, which resists continuous drainage and irrigation, I have learned to suspect the presence of a stone, and have usually been enabled to find it, though this may be most difficult. The crushing and washing out of the stone has, under such circumstances, produced a comparative cure.

I know a number of men passed middle life who are vigorous, able-bodied, and filling useful positions in life, who depend entirely upon the catheter, and whose kidneys remain uninfected, and who are all likely to die of causes other than those connected with, either directly or remotely, their prostatic obstruction. I know of others whose prostates decorate the shelves of their physicians, with their kidneys and bladders on the same shelf. I believe that the operation of prostatectomy is life-saving, and is even imperative.

DR. HUGH H. YOUNG, of Baltimore, Md.—Dr. Lewis's specimens and models are beautiful and very instructive. I have met, however, several forms of prostatic obstruction which are not shown in his collection. One case, in which no enlargement could be found by rectal and cystoscopic examination, was found by epicystotomy to have a small globular tumor of the verumontanum which was causing the obstruction. I have had several cases of so-called small sclerotic

prostate which also showed by rectal and cystoscopic examination very little evidence of hypertrophy and on which a prostatectomy would be impossible, that were cured by the Bottini. In four cases which had been previously castrated I found with the cystoscope a collerette of mucous membrane and fibrous tissue around the prostatic orifice which continued to cause the obstruction after the lateral lobes had atrophied. These were also relieved by the very small blade of my cautery-incisor.

I wish to reassert my adherence to the radical removal by prostatectomy in fit subjects. I have used both the perineal and suprapubic routes, with one death in fourteen cases. Many of my cases, however, have been so old that I have been afraid of these radical operations and general anesthesia, and I have found that the Bottini operation eminently satisfactory for these cases, and much less dangerous. I have had 19 cases over 70 years of age and 3 over 80 operated upon under cocaine with electro-cautery without a death and with excellent results.

DR. FREDERIC R. STURGIS, of New York.—With regard to the tumor of the verumontanum the endoscope would have shown what the cystoscope failed to show, and have obviated the necessity of the suprapubic cystotomy.

DR. J. P. BRYSON, of St. Louis, had seen three or four such cases manifesting hypertrophy of the verumontanum. In one case he had done an epicystotomy and had found the hypertrophied verumontanum tuberculous and had curetted it away with a satisfactory result.

He would like to say once more in reference to certain remarks that he did not know anybody who was doing prostatectomy as a routine measure; he certainly did not.

One of the specimens shown by Dr. Lewis presented, what to him seemed an inadequate incision, and yet the patient showed signs of marked improvement after the Bottini operation. In this connection he would like to call attention to the advantages gained in old men from the deep instillation of nitrate of silver, stimulating the contractile power of the detrusor. He had seen a number of cases who have gained by this treatment in general health and power to empty the bladder. But when the treatment ceased the atony and the residual gradually returned. He was inclined to attribute some at least of the improvement in those cases, where the Bottini operation was done, to the stimulation of the vesico-urethral outlet.

DR. WILLIAM T. BELFIELD, of Chicago.—It is my belief that the rational solution of the problems arising from prostatic enlargement must come through a study of the etiology of this condition, rather than of the anatomy of the enlargement itself. We pay, perhaps, too much attention to a study of the manifold contours of individual prostates, and too little to the reasons for partial or complete retention. There is evidently another factor in the case than the mere prostatic enlargement; for we know that the removal of the mechanical impediments in the urinary channel, does not always restore the power of urination. The removal of both testicles has repeatedly caused complete atrophy of the enlarged prostate without restoring voluntary urination; moreover, the conditions so commonly caused by prostatic enlargement—"prostatism"—has been repeatedly recognized without any enlargement of the prostate, even in youths under twenty years of age; I reported such a case ten years ago, and others have been since described by Fuller and by Chetwood, under the designation "contractures" of the bladder neck. I have seen the same condition in women also. There can be no doubt that this condition—which exists in women, in young men, and in

older men where prostates have been removed by castration or prostatectomy—is frequently associated with, but not distinguished from, prostatic enlargement; we are accustomed, erroneously, I believe, to ascribe the familiar urinary retention solely to the prostatic impediment. Every operation for the relief of prostatic enlargement should reckon with this degeneration or “contracture” of the vesical outlet quite as certainly as with the tumor formation in the prostate. When the haphazard Bottini operation succeeds, its success is due to the institution of a “low-level” channel through the vesical outlet, and the apparent success of the perineal prostatectomy is probably due to the destruction of the rigid vesical outlet rather than to the removal of prostatic tissue.

Dr. Bryson has very wisely emphasized the importance of restoring the vascular equilibrium in the prostate and bladder. I would call attention to the necessity for overcoming the rigidity of the vesical fibres encircling the outlet, in addition to removing the prostatic overgrowth.

As to the etiology of prostatic enlargement we can as yet only speculate. My own impression is that this enlargement is entirely due to a perversion of the testicular secretion. The prostate is primarily and essentially a sexual gland, in many of the lower animals it has no relation, even of contact, with the bladder. Its glandular structure undergoes prompt and certain atrophy when the normal testicles are removed, showing that it has no function except that imposed upon it by the internal secretion of the testicle. It seems, therefore, reasonable to assume that the hypertrophy of its glandular elements (and this is the first step in the prostatic enlargement) is prompted by perversion of the secretion of the testicle.

DR. BRANSFORD LEWIS, of St. Louis.—I wish the gentlemen present would understand my purpose in presenting my paper; it was not to push anything of my own in the way of operating, but it was to promote a more broad-gauged way of viewing prostatic surgery. Nine out of ten men will ask the specialist “What operation do you prefer for prostatic hypertrophy?” These specimens show that no one operation is applicable to every case. If there is a vascular interference which produced a urinary obstruction, as suggested by Dr. Bryson, that is simply a further proof of the correctness of my position. Dr. Belfield’s suggestion that there are other causes besides contraction, or fibrous degeneration, etc., is a further proof, and no contradiction to my position.

I wish to take issue with Dr. Bryson on one point with reference to his claim that intravesical projections do not produce obstruction. I look upon this thing as I do on the old adage, that the proof of the pudding is in the eating thereof. In one instance after prostatectomy had been done by him there was complete retention from January to December; after that I removed an intravesical projection which gave relief and cured the case. Hence I am a believer in the obstruction from intravesical projections. Often the only thing necessary to do is to relieve the collar and drain.

In the other case where I did a Bottini and failed to obtain good results and where Dr. Graves succeeded by the suprapubic removal, that I think is another demonstration of my position, for I should have done, not the Bottini, but the suprapubic removal. The case was one of pedunculated outgrowth that the incision only bisected and did not remove.

I want to say that Dr. Belfield’s allusion to the Bottini operation being a mere scratch is an injustice. I have seen cases in which the Bottini incision was so deep as to do away with the retentive power of the bladder. I saw an

instance in Berlin last year in which a Bottini was done so successfully that the patient was compelled to wear a urinal afterwards.

Detection of Stone in the Kidney by Skiagraph.—DR. JAMES BELL, of Montreal, showed photographs of a case in which the skiagraph had demonstrated a stone with perfect satisfaction. The patient was rather a slight, poorly nourished woman, 42 years old. She had her attack of colic when she was four months pregnant in 1897. She remained well until 1900, when, being three months pregnant, she had another attack. She then remained well until 1901, when she had other attacks occurring on the right side. She had observed no change in the urine, but she declared that she had noticed some swelling on that side with each previous attack. After admission to the hospital, skiagraphs were taken which showed a small oval stone in the lower half of the kidney which was removed by the loin incision, and it was shown to be of the size and shape as depicted in the skiagraph.

DISCUSSION.

DR. F. TILDEN BROWN, of New York.—This is of growing importance in the surgical diagnosis of suspected cases of stone in the ureter, and we are all having additional evidences as to its value. I have no hesitancy in attaching a great deal of confidence to the X-ray pictures when they are taken by such a man as Dr. A. B. Johnson, one or two of whose pictures I have had the opportunity of showing this Association. An interesting case which had one or two features connected with it which were entirely novel to me might be mentioned. The patient was a physician about 65 years old who was referred to me with symptoms referable to the prostate. He had been tormented for months with a sense of formication and boring in the rectum and posterior urethra due, as he thought, to being of a very neurotic temperament and youthful indiscretions. He was under my observation for all of a year at different times. Massage of the prostate would at first bring out collections of brown or yellowish-white corpora amylacea which relieved him; at other times the injection of hot water into the rectum, together with straining efforts, which expressed some of the contents of the seminal vesicles, would relieve him temporarily. He could not sit down unless he sat on cushions which he carried in the tail pockets of his coat. When he returned from a long summer vacation he was in much better shape, but two or three weeks in town brought him back to his former condition. The patient said that he felt sure that he had a calculus in the ejaculatory ducts, or the prostate, and he wanted to know if the X-ray would not show if such was the case. I thought there was little chance of it, but asked Dr. Johnson to make the attempt, the result was this picture which shows a small calculus in the right ureter, presumably not more than three-quarters of an inch from its opening into the bladder and another ureteral calculus on the left side, three inches or more from the outlet. The probability of such a condition had never occurred to me, although the man had always had an over acid urine and not infrequently uric acid crystals. After this picture was taken I attempted ineffectually to introduce my finger high enough to get pressure upon the right ureter, where the lower calculus seemed lodged. Later I had an instrument made like a much curved vesical compressor and with which to avoid touching the sensitive prostate, at the same time just behind it to identify a very tender spot referable to the ureter. If this were ascertained then to attempt dislodg-

ment of the calculus by the same means. When I touched the spot indicated in the radiograph the patient complained of pain. Dr. Johnson was unwilling to attach much importance to the first picture and asked for a second sitting by which he verified this picture. I mention the case because of the unusual features of a calculus in each ureter without giving rise to obstruction or any of the general reflex symptoms. No operation has been performed.

DR. J. P. BRYSON, of St. Louis, called attention to the subjective symptomatology. Three years ago he had read a paper referring to the influence of irritations in the lower third of the ureter. He thought there was an anatomical basis for the subjective symptomatology. The longitudinal fibres of the ureter, running down, spreading out and terminating at the vesical outlet, mingle with the muscular fibres of the trigonum. The lower part of the ureter is supplied with blood from the inferior vesical artery, which passes down and supplies also this portion of the bladder with blood. The nerves presumably accompany these vessels. If that be the case he could see an explanation of the pain about the prostate and in the trigonum alongside and above the seminal vesicles.

DR. CHARLES H. CHETWOOD, of New York.—Apropos of what has been said I should like to refer to a case of Dr. Keyes. A gentleman of advanced age who had symptoms of frequency and urgency of urination, and had been treated for months for bladder trouble, came to him for advice. The fact that the prostate was flat and not enlarged *per rectum*, that there was practically no residual urine and there existed evidence of pyelonephritis, suggested to Dr. Keyes that the symptoms might be reflex from the kidney. An X-ray picture was taken by Dr. Alexander Johnson, which located a stone in the lower portion of the renal pelvis; which was corroborated by operation. Shortly after the operation the urinary symptoms had greatly subsided.

DR. BRANSFORD LEWIS, of St. Louis.—I wish to show a specimen of a calculus in the ureter. The case was one of general lithiasis in which there was a stone in both kidneys and in the left ureter. One interesting feature about the case was that the cystoscope showed the urine coming from both ureteral openings, notwithstanding the fact that this left ureter appears to have been filled with the calculus.

DR. F. TILDEN BROWN, of New York.—It did occur to me, and there is still much doubt in the mind of the surgeon who is his regular attendant, that the shadow is that of a ureteral calculus. It was thought at first that it might be a phlebolith in a vessel of the vesical plexus. The difficulty of differentiating by radiograph between a concretion in the seminal vesical, the prostate, the lower ureter, or one of the veins beneath the bladder is very great. It is difficult to say exactly what relation each should bear to the bones, anterior and posterior to the shadows. In this case I would say that if the patient had been a suitable subject for ureteral catheterization it would have been easy to determine before now whether this shadow was a ureteral calculus or not. I have already urged if he does not respond to medicinal treatment, that before any operation is made, that I may be allowed to use a general anesthetic and pass the ureteral catheter into each ureter to ascertain the exact locations of the concretions and, if they exist, at the same time, to inject some lubricant like sterile oil in order to distend and overcome, if possible, the contraction of the ureter and the lower ureter, while the capped catheter will draw back the urine until additional distention and sufficient pressure has accumulated to justify the hope that upon withdrawal of the catheter the calculus may be expelled.

Even if this did not happen we would be in a position to know what surgery should or should not attempt to remedy.

DR. CHARLES H. CHETWOOD, of New York.—I should like to ask the personal experiences of those present in those cases in which the stone was purely uric acid. It has been stated that such a stone could not be shown by the X-rays.

DR. WILLIAM T. BELFIELD, of Chicago.—In reference to calculi in the ureters I might refer to a patient of my own who was also seen by Dr. Martin and Dr. Guiteras. The symptoms were those of an extremely severe infection of the prostate and bladder; the cystoscope showed no stone or other cause for the infection. He had suffered a great many weeks and had taken a great deal of morphine. Dr. Martin had Dr. Leonard take a skiagraph which revealed calculi in the ureter. This patient came to Chicago bringing the picture with him, and asked me about the wisdom of performing an operation. I suggested that he take glycerine, a teaspoonful four times daily. Five days later he came to my office and said that the pain was almost gone and that something had happened. The pain formerly felt in the prostate and rectum was now in the glans penis. The cystoscope revealed calculous debris which I removed through a perineal opening. When seen some months later he had remained entirely well.

DR. J. P. BRYSON, of St. Louis, remembered a patient, the subject of a pretty general lithiasis, who had a pure uric acid calculus. The urine was perfectly normal, when a stone blocked one ureter. Two skiagraphs were taken which showed nothing. Within one week a pure acid calculus passed which was of the size of a bean.

SECOND DAY, APRIL 30, 1902.

The morning session was devoted to a General Discussion on the Surgical Treatment of Genito-Urinary Tuberculosis.

Renal Tuberculosis.—DR. F. TILDEN BROWN, of New York, opened the general discussion on this topic and said that the results of necropsies were at variance with the clinical showings in the disease, as a rule, and that if we relied upon the evidence as produced at autopsies, we would be convinced that there were but few cases of isolated renal tuberculosis which justified surgical intervention. He thought that a contribution from the hospital records extending over a period of ten years, would be of value, although the statistics were incomplete. At the Presbyterian Hospital, New York, from February, 1892, to March, 1902, there were 1427 necropsies, of which number 258 (18 per cent.) showed tuberculosis lesions somewhere in the body and 48 of them (18.5 per cent.) showed renal tuberculosis. Of these 48 cases, 32 occurred in males and 16 in females. Of the 48 cases, 39 had tuberculous lesions in both kidneys, while but nine had tuberculosis of one kidney. Of these nine cases, 5 involved the right, and 4 the left kidney. Of the 258 tuberculous bodies it was shown that the kidneys were more commonly involved than the spleen, liver or adrenals. During the same time there were in the hospital 78 cases diagnosed as renal tuberculosis, if the authorities be given the credit of making such a diagnosis of 48 cases where the kidneys were found to be involved in tuberculous lesions at autopsy. Of these 78 cases, 13 had nephrectomy performed, with one death occurring two months after the operation; at the autopsy the other kidney was found to be far advanced in the disease. That gave a mortality rate of 7.6 per cent. Of these 13 cases, 6 fell into the speaker's hands; he had no deaths. The vast majority of cases that

come to autopsy which show tuberculous lesions of the kidney were of the disseminated miliary type, and with such a class of cases, of course, the surgeons have nothing to do with. At the present time we are sure that there is no form of medicinal, hygienic or climatic treatment that is at all curative in renal tuberculosis. The evidence at necropsies show as high as 3 or 4 per cent. of healed cases of pulmonary tuberculosis; whereas, it is the rarest occurrence to find at autopsy any evidence of healed renal tuberculosis. The speaker then showed photographs of Nature's efforts in the attempt to cure renal tuberculosis. From a surgical standpoint he was satisfied that no surgeon to-day would hesitate to perform an immediate nephrectomy when he was sure that one kidney contained the only appreciable focus of the tuberculosis. Through the courtesy of his colleague, Dr. Tuttle, he was able to show a picture of a case of pseudo-tuberculosis of the kidney, a very rare condition, which was first described in 1891.

Tuberculosis of the Seminal Tract.—HUGH H. YOUNG, M.D., of Baltimore, read a paper on this subject.*

Demonstration of Two Cases of Genito-Urinary Tuberculosis.—PAUL THORNDIKE M.D., of Boston.

GENTLEMEN: Here are two specimens of great interest in connection with the modes of invasion of the tubercle bacillus into the urogenital tract. I am able to show them through the courtesy of Dr. L. R. G. Crandon, of Boston, who recently prepared and demonstrated them. I quote from Dr. Crandon: "Case 1. This is the case of a man 67 years of age who had the obstructive symptoms of enlarged prostate and died, after a time, of an intercurrent affection. At the autopsy no tuberculous deposit was found in the body throughout or in the urogenital system, except in one lobe of the prostate, where there is a single, large, round, caseous mass surrounded by typical tuberculous tissue. The enlargement of the prostate in this case is of the usual type and is not due to tuberculosis. Epididymis, vas deferens, seminal vesicle, ejaculatory duct, bladder, ureter, and kidney on both sides showed no tuberculosis. In this case the deposit in the prostate was not alone the only manifestation of tuberculosis in the urogenital system but also the only one in the body."

Specimen shown.

"Case 2. The case from which this specimen was taken was one of well marked Addison's disease that had also prostatic symptoms, namely, pain, enlargement, and obstruction, all of which came on only in the last few months of life, giving clinical grounds for the presumption that the disease of the adrenals preceded that of the urogenital system. Examination after death shows well marked, old tuberculosis of the left adrenal, but no disease of the right adrenal, or of either kidney. The left seminal vesicle is dilated and filled with caseous material, and its walls tuberculous, while the prostate is infected throughout, the processes, however, being older and more extensive on the left side. The epididymis and testis on both sides are normal. The left ureter about 3 c.m. from the bladder is dilated and has cheesy, tuberculous walls, but microscopic examination from 5 m.m. along the left vas deferens, particularly the portion near the ureter, shows no infection. In this case the fact is clear that the ureter on the same side as the diseased adrenal has been infected through

*Will be published.

its mucous lining by the tubercle bacillus carried there presumably by the urine secreted by the kidney, the adrenal of which is tuberculous."

Specimen shown.

Tuberculosis of Testicle—Resume of Dr. Thorndike's Paper.—DR. PAUL THORNDIKE, of Boston, presented a short paper on tuberculosis of the testicle based upon 75 cases of the disease, collected from the surgical records of the Boston City Hospital.

Sixty-seven per cent. of these cases occurred between the ages of 20 to 40 years.

Sixty per cent. of these cases involved the left testis.

Thirty-six per cent. of these cases involved the right testis.

Eighteen per cent. of these cases involved both testes.

Gonorrhea had preceded the development of the disease in 30 per cent. of the cases, and trauma in 12 per cent.

The epididymis alone was involved in 42 cases.

The epididymis and testis were involved in 32 cases.

The vas deferens was palpably involved in 12 cases.

The seminal vesicles were palpably involved in 16 cases.

The prostate was palpably involved in 13 cases.

Dr. Thorndike's paper discussed two points: 1. The feasibility of removing the epididymis and leaving the testis behind, in proper cases; 2. the benefit to the patient of operations which remove only a part of the disease in cases where total eradication of the tuberculous process is impossible.

An Analysis of Ninety-six Operations for the Relief of Tuberculosis of the Testicle.—DR. ORVILLE HORWITZ, of Philadelphia, after recounting many cases, said that he seemed warranted in presenting the following conclusions:

(1) A primary tubercular infection of either the epididymis or testicle may occur, the former being by far the more common. (2) A primary infection of the epididymis, secondarily that of the testicle, is more common than the descending one. (3) Primary involvement of either the epididymis or testicle usually takes place through the circulation; the soil being predisposed to the location of the tubercle bacillus, either by a slight traumatism, or by some infective condition which has given rise to inflammation of that organ, most commonly an attack of gonorrhea. (4) Secondary tubercular involvement of the epididymis or testicle sometimes follows a primary focus of the disease in other portions of the body, more commonly in those organs that are in a direct anatomical connection with the sexual glands, such as the seminal vesicles, prostate, urethra, bladder, ureter, or kidney. (5) The invasion of the testicle may be rapid, associated with acute inflammatory symptoms, an abscess soon developing; or the onset may be slow, the symptoms simulating those of either chronic syphilitic orchitis, or malignant disease of the organ. (6) The tuberculin test should always be employed in doubtful cases where only one focus of the disease is known to exist. (7) In doubtful cases, associated with hydrocele, the fluid should be examined for a tubercle bacilli, and inoculation experiments made. (8) The injections of either emulsions of iodoform or of sulphate of zinc into the diseased part are not to be recommended. (9) In all cases of encapsulated caseous nodules quiescent in the epididymis, epididymectomy should be performed. (10) Epididymectomy, together with resection of the vas deferens, is not attended by either atrophy of the testicle or sexual weakness. (11) The

drainage of tuberculous abscesses followed by the use of the curette, is only to be employed where radical treatment is not permissible, as it is attended with more or less danger and is generally unsatisfactory in its results. (12) In instances where the epididymis alone is involved, a resection of the diseased structure is all that is required, whether a partial or complete resection of the vas deferens is to be undertaken is still undetermined. (13) Double orchectomy should be performed when both glands are diseased, provided there is not extensive co-existing tubercular infection of other organs. (14) Whether infected seminal vesicles should be always removed at the time that the epididymis or testicle is resected is a question open for discussion, from the fact that in a large majority of cases the removal of the primary seat of the disease is followed by a subsidence of the tubercular involvement of the vesicles, it is deemed wiser, as a rule, to wait and remove the vesicles later if necessary. (15) Hygienic and climatic influence play as important parts after operation in fortifying the constitution against further invasion as they do in other tubercular conditions. (16) The antitubercular remedies are of great value in controlling the disease, and should always be employed in conjunction with whatever surgical procedure may be deemed necessary.

DR. J. P. BRYSON, of St. Louis.—It was very pleasing to hear Dr. Brown call attention to the fact that we are now willing to do nephrectomy in cases where the remaining kidney was under suspicion. It had been one of the surprises to find the remaining kidney make a marked improvement after the removal of its more diseased fellow. This takes place in other surgical diseases of the kidney, such as come about from infectious conditions and those produced by calculus in the substance of the gland or in its pelvis. A point of importance in connection with renal tuberculosis is the fact that the disease is unevenly distributed and is often not of a virulent type, and that portions of the organ are not affected at all, remaining capable of doing good eliminative work, so that it becomes a question, how much effective kidney substance we have remaining on a given side. In the matter of the medical therapeutics his observations are entirely in accord with those of Dr. Brown, that in tuberculous nephritis neither medication nor climatic treatment is of value.

Another point of importance is the question of a partial or a complete nephrectomy. In the beginning we were inclined to do only a partial nephrectomy, removing the diseased foci; but he believed that now practically all are united in the opinion that a total removal in such cases is the proper course to pursue even when the disease appeared to involve to a certain extent the organ which was to do the work for the body. On account of the peculiarity of the manifestations of tuberculous disease of the kidneys we cannot always come to a satisfactory conclusion as to the extent to which one kidney is diseased. The development of a fibro-lipomatous change is not uncommon in these cases and is of great interest. We remember that some years ago Dr. Adami of Montreal reported several cases where, on autopsy, atrophied kidneys were found in the centre of lipomatous tumors. Personally he thought such changes were not uncommon. He had seen two cases, one in his own practice, where these lipomatous changes had taken place to a marked degree, little of the kidney remaining imbedded in a mass of fat. In both of these cases there was no considerable development of fat throughout the body, and in both cases stone was found in the pelvis of the kidney.

In the cases of terminal renal tuberculosis operative intervention did not

seem encouraging. Most of the cases seen by him died of miliary tuberculosis within one or two years. Sometimes this general tuberculosis was of a fulminating type.

One form of tuberculosis, difficult and sometimes impossible of diagnosis and usually extremely fatal, which is apt to be mistaken for other diseases, is that where, according to pathologists, a very few bacilli are found, which apparently produce a very large amount of ptomaines. These make extensive diffuse swellings, great pain and polyuria and probably necrosis of the affected organ. This condition we see sometimes in the testicle. In one instance he incised the loin, split the capsule finding a high degree of intrarenal tension. Following this there was extensive sloughing with caseation of the organ. The patient died four years later of general miliary tuberculosis.

If he had been told five or six years ago of such lesions, as those described by Dr. Young he should have been surprised. That surprise is not so great now. Probably we shall find more of these cases. A few weeks ago he saw a case of tuberculosis of the vas deferens and seminal vesicles on the left side, thoroughly localized without any demonstrable involvement of the prostate or bladder, that he would have operated but for the fact that the patient had active pulmonary tuberculosis, contraindicating surgical intervention. The patient was sent to New Mexico for climatic treatment and reports decided improvement.

In regard to the manner of dissemination of the disease it did not seem to him that there was satisfactory evidence that tuberculosis traveled from the ampulla back to the testicle except by continuity. Observations in blenorrhagic inflammations of the vas deferens had shown that the micro-organism can be propagated down the vas without symptoms, finally developing an epididymitis. This, however, had not been shown in the case of tuberculosis. The physiological current is not continuous, and the bacilli have no power of independent motion. On the other hand, it has been clearly shown that in the great majority of cases the infection, even of closely associated organs, is through the blood vascular channels. Moreover, tuberculous foci have periods of activity and periods of repose almost to the extent of becoming obsolete, which makes it difficult to pronounce as to their relative duration in the body. So that it is not easy to determine which is a primary infection even in foci situated close to each other.

Dr. Young's method of utilizing the vas deferens both as a drainage tube and as an avenue for local medication was ingenious; and he believed it worthy of a trial. One most frequently observes that those tuberculous foci, which are drained by fistulous tracts get along better than those not drained at all; and he should put in practice Dr. Young's suggestion at the next opportunity.

DR. RAMON GUITERAS, of New York.—A patient was sent to me for operation with a supposed bubonocoele. The operation revealed a tubercular abscess of the cord in the inguinal canal holding about one ounce of pus; it was evacuated, drained, and it healed. The patient had a tubercular epididymis.

Another patient was sent to me at the hospital for operation for a suppuration which discharged at the umbilicus. When I operated I found a sinus which ran down in the direction of the appendix and so thought I had to deal with some trouble with an appendiceal abscess from which the pus drained up between the peritoneum and the abdominal wall to discharge through the umbilicus. Therefore, I made an incision over the region of the appendix when I found that the suppurative area was localized lower down; continuing the

incision downward I found a large succulent typical tubercular cord with a pus cavity about it which drained up between the abdominal wall and discharged through the umbilicus when the patient was in the recumbent position. Shortly after operating upon the patient, he had an attack of hemiplegia and died a few days later.

DR. GEORGE CHISMORE, of San Francisco.—I am lost in admiration at the scientific character of the papers presented upon this subject to this Association. There has been a marked progress in the surgical measures which have been adopted for the relief of this complaint. Such papers should not go without discussion and, in order to give a wider latitude, I would like to submit a totally different view of the subject and give you the conclusions that I arrived at from an entirely different method of observation. Seventeen years ago I conceived the idea that perhaps tuberculosis of the genito-urinary tract might pursue the same course to an eventual recovery as is shown in some of the other localized tuberculosis in the body. Acting upon that opinion, such cases of tuberculosis of the genito-urinary tract as came under my observation from that time to this have been treated by strictly letting them alone locally, with one exception. In one case the patient had a stricture of the deep urethra which was the result of a long antecedent urethritis in which there was ulceration, perforation and extravasation; in this case I operated. This patient died about six months afterwards from a general tuberculosis of a very diffuse character, and this was the only fatal case of genito-urinary tuberculosis I have seen during that period of time.

The methods of diagnosis in the cases to which I refer lack the scientific accuracy of those here presented by the authors of the papers under discussion, and I can not add to the wonderful collection of anatomical specimens that are here displayed, the majority of cases that have been under my care still carry them about and still find them useful and entertaining. So far as my powers of diagnosis are concerned, every variety of tuberculosis of the genito-urinary tract is included from the testicle to the kidney, with destruction of the kidney, involvement of the ureters, tuberculosis of the bladder with ulceration and perforation, double suppurating epididymis and tuberculosis of the testicle itself.

In suspicious cases of tuberculosis of the kidneys or the bladder there is one symptom that I find to be always present, *i.e.*, polyuria, which will aid us in making a correct diagnosis.

Patients who come to me with this symptom fully developed and who present no other obvious cause, always arouse suspicion and I will not make any local exploration, not even pass a catheter, until I am satisfied they are not the subjects of tuberculosis of the genito-urinary tract, lest I transform frequent micturition into *frequent and painful* micturition. Sometimes it takes months to do this, but in none of the cases that I refer to have I failed to find the tubercle bacilli.

On the other hand careful watching of these patients leads me to believe that, in the great majority of cases, hygienic treatment will give a partial or full recovery. At the first session of the Association I reported a case in which there was frequent and painful micturition indicative of pyelitis. At that time the gentleman was under my care and suffering from a ferocious pyelitis and I brought him to New York in 1867 to consult Drs. Van Buren and Keyes who suggested tuberculosis as the cause. All local treatment was stopped. He was

given cod-liver oil and sent to Dakota where he began to gain. A lumbar abscess formed which opened spontaneously. Only last week I saw this man and he was the strongest of three sons of the family, although he still has tubercle bacilli in his urine. He has lived a useful and laborious life.

I have in mind another case seen fifteen years ago, a gentleman supposed to have tuberculosis of the left kidney following traumatism. During the course of fifteen years he has had a double tubercular epididymitis; he has had tuberculous ulceration of the deep urethra with extravasation. He voided urine very frequently, sometimes fifty-six times in the twenty-four hours. Fifteen years have gone by and yet he is in good condition, being in full weight and the head of a large business, leading a useful and happy life. There are tubercle bacilli in the urine and he voids urine about 8 times in the 24 hours. Had I undertaken surgical measures I think the man would have had a general tuberculosis.

Seven years ago a patient developed a tuberculous epididymis with sloughing of the scrotum of the left side and a tuberculous degeneration of the testicle. During my absence from home he went to a hospital and a distinguished gentleman there threw up his hands and said he must be castrated immediately; but this patient said "Hold on!" and so escaped from that hospital and came back to me. That man has recovered. I saw him a few weeks ago and he is still very well.

DR. HUGH H. YOUNG, of Baltimore.—I should like to ask Dr. Chismore whether, in the hygienic and climatic treatment, the patient rests or takes active outdoor life.

DR. CHISMORE.—In a large number of cases the only treatment was allowing him to go unmolested; when over-worked, relief from work, and cod-liver oil given liberally.

DR. GEORGE K. SWINBURNE, of New York.—I should like to relate two cases that have come under my observation, although the latter part of the operations was done by others.

The first case was a gentleman who, in 1891, evidently had tuberculosis of the lungs and was sent to Kentucky where, by living in the open air, was apparently completely cured. Three years before I saw him the patient had symptoms which pointed to tuberculosis of the right kidney and, in St. Louis, improved so under creasote that operation was not considered necessary immediately. I could not get much of a history at the time but, while under my care, (he had suffered from grippe several weeks before,) he had painful and frequent urination with cloudy urine, which was examined microscopically and numerous tubercle bacilli were found. At the same time a local examination revealed an enlarged and tender prostate, showing a strong probability that it as well as the bladder was involved. There was nothing to be found on either side in the kidney region. The symptoms so strongly suggested calculus of the bladder that I felt he ought to have the bladder searched. Wishing to share the responsibility with some one else I asked Dr. Alexander to see the case with me. The urethra was so exceedingly sensitive that no instrument could be passed without anesthesia, so ether was administered. The searcher revealed no calculus. He improved by rest in bed and proper feeding. I did not feel warranted then in suggesting any operative procedure. He was very anxious to go to Paris so he went feeling fairly comfortable but he returned within two months, having lost much weight and having a large swelling in

the right lumbar region. He went to Dr. Bull who did a nephrotomy for a large pyelonephrosis. This preliminary nephrotomy was followed shortly after by a nephrectomy and after that the patient gained nearly fifty pounds, and has remained in a much better state of health than he has had for years and this in spite of the fact that he undoubtedly has some foci still. The operation was done the latter part of the summer of '99.

The second case I saw in January, 1900, he was a bookkeeper who was referred to me by Dr. Cowell in Bridgeport. This patient had had several attacks of painful and frequent urination which required him to absent himself from business; during the intervals he was able to go to his work. Several years previous he gave a history of having had pulmonary tuberculosis. Examination of this gentleman showed a hard tumor in the region of the right kidney; nothing was found on the left side. Examination of the urine revealed the presence of tubercle bacilli. I believed from his symptoms that there was some involvement of the prostate if not the bladder. Although the case seemed pretty clear that a nephrectomy was indicated or at least an exploratory operation, but believing that a cystoscopic examination and catheterization of the ureter would give further information, I asked Dr. Alexander to see the case with me. The bladder was normal but clouding of the lens of the instrument prevented catheterization of the ureter. The patient went home intending to return for operation. Seven days after the examination he set up an epididymitis which was very painful and caused him to lose much strength. He afterwards came to New York and in the Mt. Sinai Hospital was operated upon by Dr. Gerster who removed the right kidney, which was completely destroyed by disease. Six months after the operation he was able to return to work and was feeling very comfortable and apparently perfectly well. The operation was done about 2 years ago and the patient, although not strong, is able to be at work, which he could not do before the operation, and maintains a condition of fair health.

DR. BRANSFORD LEWIS, of St. Louis.—It seems to me that we should occupy a middle ground in this matter and be governed in our treatment by each case and not by any generalized reports, such as Dr. Chismore has given. We all know that urinary tuberculosis, especially when confined to isolated parts, may be recovered from; also, that they do have a tendency to become worse and involve other organs. In cases of strictly localized tuberculosis of the genito-urinary tract I believe that patients are safer if that part be removed, and then the usual additional treatment for this condition be given. I think that the statistics of cases of late years will bear out the correctness of my position. Therefore, I think it is very important that we should be able to determine whether there is a localized tubercular infection or not, whether two kidneys are infected or one, and act accordingly. If but one kidney be involved, especially if it be severely involved, it cannot be denied that it is advisable to remove the source of infection. Again it is known that the removal of the worse infected kidney has a beneficial influence upon the kidney less infected. We all know, too, the efficacy of simply making an opening and exposing the peritoneum, applying iodoform or some simple measure, in cases of tubercular peritonitis.

Bearing upon the subject of the danger of making local investigations in these conditions I wish to say that, within the last few months I have been using measures of investigation quite considerably. From what I had read I was lead to believe that local investigation was to be condemned on account of its liability to cause extension of tuberculous infection, etc., but subsequent experience

has changed my views somewhat. In one case where the tubercle bacilli were found in the urine abundantly and where I wished to ascertain if the tuberculosis involved one or both kidneys I repeatedly catheterized the ureters, doing so in my office, without any disturbance following; I produced no bad effects upon this case whatever. I have three cases in mind, two males and one female, in which I have made repeated ureteral catheterization and have been washing out their kidney-pelves with boric acid solution. In two of them (males), instead of there being any additional trouble following the procedure, the unilateral pyelitis that was present has disappeared and the urine is now clear in each. In the case of the female, there is movable and dislocated kidney present, and a bend in the ureter prevents favorable drainage from it; so that I suppose anchoring of the kidney will be necessary.

DR. JAMES BELL, of Montreal.—I have listened with much pleasure to the discussion of this subject. I was much surprised at Dr. Brown's statement that as the result of his observations and investigations he had arrived at the conclusion that spontaneous cure of tuberculous lesions of the kidney was very rare. I should like to refer to at least one case in which there was a spontaneous cure of a chronic form of tuberculosis of the kidney, the disease being limited to a single organ. I have seen several times in the autopsy-room cases in which one kidney appeared normal while the other existed merely as a remnant which lead the pathologist to infer that the kidney had been cured spontaneously. I have also on two occasions opened a sac of pus which was simply the remnant of a kidney undoubtedly tubercular in which the patient got well from the tubercular condition. I think that many of these cases when left alone open spontaneously. There are many cases of obscure lumbar abscess where one cannot determine the origin of the pus, some of these probably result from localized tubercular lesions of the kidney which have undergone spontaneous cure.

With reference to Dr. Thorndike's exhibition of a case of a tubercular nodule in the prostate without evidences of tuberculosis anywhere else, reminds me that I have a similar experience to report. Three or four years ago an elderly man, 65 or 70 years of age, after an acute onset, came to me with frequent and painful micturition. He had an enlarged prostate. The urgency of the symptoms called for a suprapubic cystotomy and drainage which gave him much relief, and he seemed to be none the worse for the operation. On the third day he died suddenly during the night, and the autopsy revealed the fact that he had died of cerebral hemorrhage. All his organs were examined and the only tubercular lesion found was a single large nodule, as large as a walnut, a caseating tubercular growth in the prostate; the immediate symptoms were referable to the congestion and inflammatory action at the neck of the bladder. I do not think such cases are very common.

DR. J. P. BRYSON, of St. Louis, thought that Dr. Chismore's observations were of the greatest value. He had many of his patients out in California and in New Mexico who were deriving much benefit. His remarks were intended to apply as far as medical and hygienic treatment were concerned only to tuberculosis of the kidney. He remembered the case reported by Dr. Swinburne and thought it would have been better to have removed the most diseased kidney when the patient was first seen. Though there was no fever there were manifestations of a beginning infection about the lower urinary passages; and it seemed advisable to place him on general treatment until the disease should more thoroughly localize itself. Tubercle bacilli were found in the urine. The case well illustrates

the mimicry of stone by tuberculous disease. The differential diagnosis was made chiefly from the history of the case, which showed that the crisis developed in the night and because urination, due to slight polyuria was greatly increased also during the night. The nephrectomy was of great benefit, the patient now being in a satisfactory condition.

In conclusion he would like to say that he had not up to this time done a double castration for tuberculosis.

DR. ORVILLE HORWITZ, of Philadelphia.—I have listened with much interest to the excellent papers and interesting discussion of tuberculosis of the genito-urinary tract. I have already occupied so much of the time of the Association that I will confine myself to the observations made by Dr. Chismore.

The extraordinary results obtained by him from the conservative method of treatment which he instituted for tuberculosis of the genito-urinary tract is due to the remarkable climatic influences of California. Any statement emanating from a gentleman of his standing and experience must necessarily carry great weight, but I venture to assert that if Dr. Chismore resided in Pennsylvania he would find that something more is needed for the relief of these cases besides climate.

Patients constantly present themselves who have been treated on this plan, who are permanent invalids, broken down in health, with general tubercular infection and too late for any surgical interference. I have had many patients who have refused surgical treatment take up their residence in California or New Mexico and have been much benefited by their sojourn in those latitudes. In some instances the disease has remained localized and quiescent. I have already pointed out that patients in this condition are by no means free from danger. I should hesitate to send a patient away with a primary tubercular affection which might be removed. I have had an opportunity of watching five cases of primary tuberculosis of the kidney where operation was refused. Three are dead and the remaining two are helpless invalids. On the other hand I have on several occasions removed a primary tubercular kidney, and these patients are still living and enjoy good health; hence I believe that when a clear diagnosis of a localized primary tubercular foci is clearly made out it is our duty to remove it, subsequently removing our patient to a suitable climate, that his constitution may be fortified against further invasion.

The Surgical Treatment of Bright's Disease.—By RAMON GUIERAS, of New York.—The author gave an extensive review of the literature and history of the subject, and pointed out that the first operation for Bright's disease was performed by Harrison in 1878 in a case of subacute nephritis following scarlatina, and accompanied by lumbar pain. The diagnosis was renal abscess, but on performing nephrotomy nothing but a medical nephritis was found. The albuminuria and the pain disappeared after nephrotomy in this case. Here, then, we have the first operation for a medical nephritis, but it must be remembered that Harrison had thought that in this case there was a surgical condition present, namely, a renal abscess, so that he really did not operate upon the kidney with the specific object of curing a nephritis. Since that time Harrison has operated on several cases of a similar character and noted that the relief of renal tension produced by nephrotomy induced a retrogression of the nephritis. Newman of Glasgow published some years later two cases of nephritis in which nephropexy, performed on account of the mobility of the organ, was followed by an improvement in the Bright's disease. Since 1886 a number of cases of chronic Bright's

disease have been operated upon by nephrectomy and nephrotomy usually when there was a nephralgia or a hematuria, or both, or else when some surgical condition, such as a stone, tumor, suppuration, etc., was suspected. Israel's work showed that the so-called essential hematurias and nephralgias are frequently dependent upon chronic nephritis, and that in such cases nephrotomy is of benefit. He does not consider, however, chronic Bright's disease without these symptoms as amenable to surgical treatment, and emphatically denies his intention of treating ordinary typical cases of Bright's disease by nephrotomy.

Edebohls of New York was the first to operate upon kidneys with chronic Bright's disease with the specific object of curing the nephritis, and not simply for the purpose of relieving symptoms, or with the expectation of finding some strictly surgical condition. Edebohls operated upon eighteen patients, in sixteen of whom he performed nephropexy by a method involving the stripping of the capsule from one-half of the organ, and anchoring it to the posterior abdominal wall, while in the remaining two cases he simply decapsulated the kidneys and cut away the capsule without anchoring the kidney afterwards. There was no mortality in this group of cases, and the results were such as to justify the further employment of this operation (decapsulation) as a means of treating chronic nephritis.

The author reported two cases of chronic Bright's disease, which he operated upon by stripping the capsule. The first case was that of a man aged 79 years in which complete double decapsulation was performed, the second that of a woman aged 35 years in whom a partial decapsulation and nephropexy was performed. In a third case a woman aged 44 years who was suffering from chronic nephritis, but who was in fair condition, collapsed on the operating table before the kidneys had been exposed, and was resuscitated with difficulty.

The first case reported by the author was operated upon over a month ago, and has already shown improvement. The second case was operated upon two weeks before the presentation of this report, and sufficient time has not yet elapsed to warrant conclusions as to its results. The third case cannot be considered as the operation was not completed.

Other cases have been referred to the author for operation, but they were considered unsuitable, either because they did not show sufficient symptoms of chronic nephritis to warrant an operation, or because they were too far advanced to offer fair chances for a trial of this procedure.

The author concludes (1) That nephropexy is always a good procedure in movable kidney in which chronic nephritis is present. (2) That nephrotomy has proved to be valuable in unilateral Bright's associated with hematuria and nephralgia, and (3) That complete bilateral decapsulation has not as yet been employed extensively enough to warrant any positive conclusion as to its value, up to the time of writing, with the exception of Edebohls' two cases, and the case here reported, no instances of decapsulation performed for the cure of chronic Bright's disease have been recorded.

DISCUSSION.

DR. ORVILLE HORWITZ, of Philadelphia.—My experience for the relief of chronic nephritis is limited to four cases, a detailed account of which will be found in the Transactions of the College of Physicians for 1897. The patients operated upon were presumed to be suffering with stone in the kidney, all the

symptoms of which being present but hematuria, the urine containing albumin and hyaline casts. The kidneys were exposed after the manner suggested by Edebohls. In each instance the capsule was incised, and in three cases the substance of the kidney structure was divided so that the pelvis could be examined. Nothing was found to account for the symptoms from which the individuals suffered; they all recovered from the operation and have been free from any kidney symptoms ever since. The casts and the albumin have permanently disappeared from the urine. It is presumed that these patients suffered from a chronic nephritis, associated with a slightly movable kidney, which occasionally became displaced, thereby kinking the ureter; this indeed is the only mode of accounting for the paroxysms of pain which simulated renal colic. It is conjectured that the cicatricial tissue surrounding the kidney, resulting from the operation, served to hold the organ firmly in place and thus prevent recurrence of the pain. The interesting feature in these cases is the disappearance of the nephritis after operation.

DR. RAMON GUIERAS, of New York.—A great many operations have been done for nephralgic and hematuric nephritis, and it was generally thought, in these cases, that there was a stone in the kidney. Tiffany reported a case in 1889 in which there was a nephritis accompanied by nephralgia and which was operated upon, a nephrotomy being done, with good results following. These operations at first were not done for Bright's disease but because it was thought some surgical condition existed such as stone in the kidney. Very often hematuria is not due to stone or other surgical diseases in the kidney but to some other condition of the organs such as chronic Bright's. One should remember, however, that one cannot always find a stone by an exploratory nephrotomy. Last year I tried to find a stone by exploratory nephrotomy, and passing probes down the ureters and failed, but, at a subsequent operation in which I removed the kidney, I found the stone after its removal.

Selections.

GENITO-URINARY DISEASES.

Chronic Cystitis Due to Bacillus Typhosus. — Report of a Case of Seven Years' Duration.—By HUGH H. YOUNG, M.D., (*Maryland Medical Journal*, Nov., 1901, p. 456.)

This interesting case has been referred to previously in articles by Gwyn, and by Richardson. The patient was a male, thirty-nine years old, unimportant previous history. Complaint, bladder trouble dating back to an attack of typhoid fever, in August, 1893. On admission he complained of pain in the back, and pain on urination, which was more frequent than normal. Was constipated, but had no abdominal pain. Urine, neutral, cloudy, albumen abundant, sediment of pus cells. No diazo reaction. Though the symptoms were somewhat clouded, Dr. Osler considered it a definite case of typhoid fever. The patient was discharged two months after admission to the hospital, after which he returned to his work, but still noticed pus in the urine.

Four years later (July, 1897), patient contracted gonorrhea, which was soon cured, but the urine remained purulent, as before. In March, 1898, the urine was very cloudy, of a peculiar gray opacity, due to pus cells, and small, thin bacilli, which decolorized by Gram. No other bacteria present. A culture taken from the bladder with a searcher, after sterilizing urethra and penis, showed on plate cultures a pure culture of a bacillus which decolorized by Gram's stain. Inoculations into various media corroborated this evidence. Suprapubic aspiration of the bladder, showed the same organisms—identical with the bacillus typhosus.

He soon went to work again, and returned in September, 1899, with another attack of gonorrhea from which he has never been entirely freed.

Cultures made on numerous occasions from urine taken from the bladder with aseptic precautions, still showed the bacillus typhosus in pure culture. Widal tests always positive.

With the cystoscope, the bladder mucosa was generally red in color, the individual vessels not being visible. Numerous small ulcers covered with fibrin present. Ureteral orifices deep red in color, and surrounded by swollen mucous membrane. Owing to the great amount of pus and fibrin in the bladder, the examinations were constantly interfered with. Diagnosis: General chronic ulcerative cystitis.

Throughout the course of the disease the patient complained of slight malaise, chronic constipation, and pain in the back, but was never acutely ill. Urine always cloudy. Never contained blood. No pain. Stream forcible. Albumen averaged 0.5 per cent. After cystoscopic examination, an acute exacerbation of the gonorrhea occurred, followed by an invasion of the bladder with a gonococcus—at first only a few diplococci appearing in the last urine, but finally great numbers, intracellular, decolorizing by Gram. Cultures were also obtained from the bladder, by suprapubic aspiration. This invasion of the bladder occurred despite the constant administration of urotropin and bichlorid irrigations (1 to 50,000).

Four months after this infection of the bladder, typhoid bacilli and gonococci were both still present in considerable numbers.

There are but two other recorded cases of chronic cystitis due to typhoid bacilli—those of Rovsing, and of Houston. A. L. W.

The Bradshaw Lecture on Nephrectomy, Nephrolithotomy, and Lithotomy.

—By T. R. JESSOP, F.R.C.S. (*British Medical Journal*, Dec. 14, 1901, page 1721.)

The speaker undertook his first nephrectomy in June, 1877, this being the first nephrectomy having been undertaken of set purpose in England. The patient was a child $2\frac{1}{4}$ years old, with a large tumor in the left loin, and bloody urine. The new growth and the kidney were both removed, and immediate recovery was complete and satisfactory. Several months later the child died, however, with signs of a recurrence. Since then he has performed the operation in young children eleven times, in nine by the lumbar and two by the abdominal route. The choice of route has been determined by the size of the tumor and its mobility. Nine of the eleven patients recovered from the operation, but the longest survivor lived only 2 years and 5 months, while one died after nine weeks. This large mortality forces the question whether it is worth while to incur the undoubted immediate risk of the operation for the possibility of so small a gain. It is even doubtful if in these 11 children there was any actual increase in the aggregate of life obtained. In every case the diagnosis was not made until the disease had made considerable headway. The only prominent signs of the disease in young children are the presence of a tumor in the loin, and hematuria. The latter is by no means constant, and the former, even if it be of fetal origin, has usually attained considerable development before its existence is suspected. Early diagnosis and operation are the only means by which this great mortality can be reduced.

In adults the results are much more encouraging. Of 16 adults operated on, 6 had tumor, 3 calculous pyelitis, 4 pyelitis, 2 fistula following nephrolithotomy, and 1 had uncontrollable hemorrhage after nephrolithotomy. Of the 6 tumor cases, 2 recovered, 2 died within a few hours from shock, 1 died on the third day of intestinal obstruction (not relieved by enterostomy, and 1 died nine days after operation from exhaustion. Of the other 10 cases, 2 died and 8 recovered.

Of the 5 transperitoneal operations, 4 died, while but 2 died of the 11 lumbar-nephrectomies. Of the 16, the mortality was $37\frac{1}{2}$ per cent. The lumbar route is to be preferred in general whenever the kidney is known to be undergoing septic inflammation, as also in those cases of neoplasm in which the growth is mobile and not of too great size. The difficulty of extracting a large growth through the limited space between the costal margin and the iliac crest would suggest the desirability of attacking it from the front. By this means also the opposite kidney and other viscera may be examined, and the renal vessels can be tied so as to render the operation nearly bloodless.

In May, 1888, the speaker cut down on a kidney in a man aged 52, whose chief complaint was "milky urine." Twenty-six ounces of pus were removed from the shell of the kidney, in addition to which he removed a stone weighing 11 ozs. 160 grs. The patient made an uneventful recovery, and died 5 years later of intestinal obstruction. There was an entire absence of pain from beginning to end, which serves to emphasize the fact that the larger the stone in the kidney, the smaller is the amount of pain, presumably owing to the fact that a small stone is mobile, and lies loosely in the pelvis, partially blocking the orifice of

the ureter from time to time and giving rise to more pain than a larger stone fixed in a calyx or embedded in the kidney substance.

On the other hand a patient who required daily hypodermatic injections of morphine was fully relieved by the passage *per urethram* of a small lithic acid calculus.

Several instances are mentioned to point to the probability of a connection between the manipulation of the kidney during the examination and the subsequent spontaneous passage of a calculus *per urethram*. The possibility of this occurrence should not be lost sight of, lest the stone become detached and released, necessitating a further operation for the recovery of the stone from the ureter or elsewhere.

Since 1896 the speaker has withdrawn the kidney from its bed so as to fully expose it outside the lumbar wound, splitting it into two symmetrical halves by an incision carried from its convex border through to the pelvis, with the object of curetting and otherwise treating masses of tubercle, then passing a few catgut sutures through the kidney substance and replacing the organ in its proper position. The results of this procedure, suggested by Henry Morris, have been eminently satisfactory. In withdrawing the kidney there is danger of tearing the pelvis or even detaching the ureter.

As to removal of vesical calculus the mortality after either litholapaxy or suprapubic lithotomy depends less upon the nature of the operation itself than upon the presence or absence of complications. The presence of cystitis, if of long standing, and if the stone be of more than moderate size, contraindicates litholapaxy, as this would be apt to convert a mild into an acute and relatively dangerous inflammation. Encysted calculus also contraindicates the crushing operation.

Perineal lithotomy and lithotrity have been discarded entirely since 1890, and the speaker is well satisfied with litholapaxy and suprapubic lithotomy. Perineal lithotomy is all but relegated to the past, and is doomed to become ere long a subject for the historian alone.

A. L. W.

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Original Communications.

A POSSIBLE AID TO THE DISCOVERY OF THE TUBERCLE BACILLI IN URINE.*

BY J. P. BRYSON, M.D.,

St. Louis,

Professor Genito-Urinary Surgery, Medical Department Washington University;
Surgeon St. Louis, Mullanphy Hospitals.

IN association with Dr. H. C. McC. Johnson, my then assistant, I have made within the past two years some observations which appear to demonstrate that under certain circumstances the bladder may be utilized as a collecting reservoir for entrapping and holding large numbers of tubercle bacilli when, in the course of tuberculous disease, these micro-organisms enter the urine-stream. In some of the cases observed the number of bacilli were so great and their arrangement such as to raise in my mind the suspicion that, under certain circumstances, these microbes might multiply in the pus- and blood-laden urine. This suspicion is all the more plausible when we consider that the bacilli are not killed by the urine and that they probably remain in

* This paper was read in the Section in Genito-Urinary Surgery, Congress of American Physicians and Surgeons, held in Washington, D. C., in May, 1897. Owing, in part to the temporary misplacement of the photomicrographs, but mainly to those demands on the time and attention of one in active practice which are well known to be hostile to satisfactory work of this kind, it has not been published. In the meantime, however, this method of utilizing this residual urine for bacteriological examination, as described, has been practiced by the writer, who has continued to find it to be of much service in determining the pathogenic factor in certain cases presenting an obscure symptomatology with little that could be depended upon as a result of physical examination. So cunningly does tuberculosis mimic other diseases—and especially those whose surgical treatment is quite different from what would be adopted once the diagnosis was assured—that any practical aid which does not involve a difficult technic seems worthy of consideration.

the albuminous secretions of the diseased bladder for a considerable length of time.

Attention was directed to the matter in an accidental way. It frequently happened in the course of routine office work that suspicion of tuberculous disease was not raised until the bladder of the patient had been emptied in the making of the "two-glasses" test or for other reason. It then becoming necessary to have some urine for bacteriological examination, a clean, sterilized catheter would be introduced for the purpose of obtaining it. This was often barely more than would fill the catheter, and, on hypogastric pressure, cause a few drops to fall into the test-tube. The soft catheter, squeezed so as to hold its contents safely, would then be withdrawn, its proximal end allowed to fall into the test-tube, and the urine to run out. It not infrequently happened that several drams of urine were obtained in this way, but that which filled the catheter was always added to the other. When Dr. Johnson called my attention to the fact that his examination of the specimens thus obtained almost invariably showed very large numbers of the bacilli, often arranged in clumps and bundles, but also singly and scattered over the field, we were at first disposed to think the fault lay with the catheter, or possibly that we were dealing with the smegma bacillus, or even that the glycerine used to lubricate the catheter might have contained them. The first and last having been corrected and the whole technic of the procedure having been carefully guarded, the result remained the same. When the bacilli were found they appeared in exceptionally large numbers.

We then instituted another series of observations, viz.: the bacteriological examinations of the urine voided naturally (tidal) and that drawn in the manner described (residual), for comparison of the relative numbers of the bacilli in cases which, for the most part, were well known to me to have tubercular cystitis, ureteritis, or pyelonephritis. I am enabled to present some photomicrographs with the slides from which they were made, showing the relative numbers of the bacilli in the tidal and residual urines. While photomicrographs cannot demonstrate fully the relative numbers of the micro-organisms, it being possible to introduce error by taking selected fields, an examination of the slides will demonstrate the distinct numerical disproportion, the greatest numbers being always seen in the urine drawn with the catheter.

Desiring to have the observation of others in this matter, I requested Dr. Mary H. McLean to make use of it in the case of a young lady now under her care, in whose urine, voided naturally, I had discovered the bacilli in scant numbers twice at intervals of a year. The patho-

logical diagnosis was in dispute, several specimens having been pronounced free of the micro-organisms by at least two competent microscopists, while another had rashly offered to stake his professional reputation on his purely microscopic diagnosis of non-tuberculous disease, all of which may go to show the difficulty of detecting them in certain cases in which there are other conclusive signs of the disease. Dr. McLean, taking the necessary precautions against error, sent me a few drams of the urine voided naturally, and a portion of that immediately withdrawn by catheter. The latter was forwarded by me to Dr. Amand Ravold, who reported under date of December 20, 1896. After announcing the presence of the bacilli in the urine, he was good enough to describe his method of procedure as follows: "The urine was centrifugalized, the sediment spread on slides and stained with carbolfuchsin solution, then decolorized with five per cent. sulphuric acid in twenty per cent. alcohol. Inasmuch as the bacilli retained the dye after the use of alcohol, which is said to decolorize the smegma bacillus, I believe them to be bacillus tuberculosis. They were found in unusually large numbers." The well-known unreliability of staining methods for differentiating the bacillus tuberculosis and the bacillus smegmæ did not of course permit either Dr. Ravold or myself to rest content with this, and we have made an effort to apply the inoculation test. Lack of time on my part has prevented the carrying out of this method except in one instance. Some of the urine voided by the patient just mentioned was given to Dr. Ravold, and used by him to inoculate a guinea-pig. He reports to me under date of April 30, 1897, as follows:

"The urine that I received from you January 5, 1897, was centrifugalized and the sediment obtained spread upon glass slides and stained for the tubercle bacillus, according to the method of Ziehl. The bacilli were found but not in so large numbers as in the previous specimen of December 22, 1897. Ten c.c. of the urine was centrifugalized and the sediment drawn off. One c.c. of this concentrated precipitate was injected subcutaneously into the abdominal walls of a vigorous male guinea-pig weighing 465 grains. Very little reaction followed. February 5th found a small nodule in the skin at the site of inoculation, about as large as a No. 5 shot. The animal did not appear to be sick and continued to increase in weight. April 7th I noticed that the pig was sick, was pale about nose and ears, breathing rapid, and had horripilation. It grew rapidly worse and died April 19th. A postmortem showed quite a large nodule under the skin at the site of injection, surrounding glands enlarged, and the peritoneum, liver, kidneys and lungs invaded with tubercles. The carcass was preserved in formol and so far I have not had time to make a microscopic examination of the

tuberculous tissue.* I am positive, however, that the animal died of tuberculosis induced by an injection of urine sediment containing tubercle bacilli, made by me January 5, 1897."

For the purpose in view at the present moment, attention may be directed solely to the relative number of bacilli found in the tidal and residual urines, and we may leave outside of our consideration the questions of the differentiation of the smegma bacillus, the anatomical source whence the tubercle bacilli were derived, the extent and virulence of the disease, the question of mixed infection, pyuria, hematuria, albuminuria, with constant acidity in purulent urines in which no tube casts are found, as well as the subjective and objective symptomatology of the disease in the pre-bacillary stage of the urine. We may thus narrow

Fig. 1.—Residual urine. Case I.

our efforts to an endeavor to point out the probable practical advantage to be derived from the use of a catheter as an aid, in practice, to the discovery of the bacilli when they are present, from whatever their source. This purpose may be sufficiently accomplished by the presentation of five slides from as many cases, each slide having upon it a stained cover-glass preparation of the sediments derived from the tidal and residual urine.

In at least two of the cases noted below, I should have failed to discover the bacilli if reliance had been placed alone in the search of the

* Subsequent examination by Dr. Ravold demonstrated the tuberculous nature of the nodules. This patient has since developed, and is now the subject of, extensive, right-sided, tuberculous pyelonephritis.

sediment derived by centrifugalization of the tidal urines, and it is worthy of note that in both these cases they were found in unusually large numbers in the residuals drawn with the catheter. In both of these cases, also, the objective and subjective symptoms did not permit withholding the diagnosis of tuberculous disease.

Case I.—C. H. P., age 52. History indicated tuberculous disease of the uro-genitary organs of several years duration, which had been aroused into activity by at least two blenorrhagic infections. Nodules were discovered in both epididymes and in both lobes of the prostate. There had lately appeared symptoms arousing suspicion of tuberculous disease of the right kidney. Tuberculous, deep urethritis and cystitis

Fig. 2.—Residual urine, Case II.

of the neck were of long standing. The vesicle capacity was too small to permit of cystoscopy. Urine showed mixed infection and was voided at intervals of about two hours by day and night. Observations made October 25, 1896. The result is shown on slide 1. On cover-glass "A" the sediment from the tidal urine shows rarely a single bacillus; cover-glass "B,"* residual urine, shows bacilli in large clusters. (Fig. 1).

Case II.—Judge J. D. B., aged 43. History of tuberculous nodules in testes since childhood. No history of other infection. Had been treated by me for past four years, bacillus in small numbers having been found in urinary sediments on several occasions. Tuberculous prostatitis, double epididymitis, funiculitis on right side. Within

* This patient died in 1899, of extensive tuberculous disease of the abdominal viscera, the lungs remaining unaffected nearly to the end.

past year evidences of ascending right tuberculous nephritis. Right testicle, completely broken down and causing great pain, was removed by me December, 1895. Observation, October 25, 1896, slide 2 sediment from tidal urine under cover-glass "A," shows no bacilli; sediment of residual urine under slide "B" shows a few bacilli (Fig. 2). At the time this observation was made the patient had greatly improved under constitutional treatment, both in general health and in his urinary symptoms. On the 25th of February, 1897, improvement

Fig. 3.—Residual urine, Case III.

having been maintained, neither the tidal nor the residual urines showed tubercle bacilli.*

Case III.—Miss B. P., age 22. History of coxitis, probably tuberculous, at age of four, resulting in complete ankylosis. History of cystitis for several years past. Tubercle bacilli found in tidal urine in winter of 1895 and 1896. Observation October 24, 1896. Slide 3, cover-glass "A" shows bacilli very rare; cover-glass "B," residual urine, shows bacilli in large masses. (Fig. 3.)

Case IV.—William S., age 32. Tuberculous nodules in left testis and cord. Nodules in prostate. Tuberculous cystitis of several years duration. Capacity of bladder five and one-half ounces. Distension-

* Patient, who has remained under observation, is now practically well. Evidences pointing to right-sided nephritis have disappeared, the urine has cleared and there are no nodules to be felt in the prostate, which is reduced in size as a result of the healing of the disease. There remains, however, a small and quite tender nodule in the cauda epididymis of the left (remaining) testicle, connected with the cicatrix of a healed fistula. The result may be attributed to the persistent taking of creosotes with the hypophosphites. No climatic treatment.

reflex exaggerated. Observation December 3, 1896. Slide 4, cover-glass "A" (tidal urine) shows no bacilli; cover-glass "B," residuum by catheter, quite numerous bacilli. (Fig. 4.)

Fig. 4.—Residual urine, Case IV.

Fig. 5.—Residual urine, Case V.

Case V.—Dr. A. O. Y., aged 31. Evidence of tuberculo prostatocystitis for past two years. Observation March 9, 1897. Slide 5,

cover-glass "A" (tidal urine) shows no bacilli;* cover-glass "B," from residuum by catheter, three drams, shows numerous bacilli. (Fig. 5.)

If any observations on the use of the catheter exactly in the manner described above have been published, they have escaped my observation. Some years ago Dr. F. Tilden Brown, of New York, courteously sent me a slide containing the largest number of tubercle bacilli, derived from urinary sediments, I had seen up to that time. If my memory serves me correctly, he stated in the letter accompanying it that the urine from which the sediment was derived had been drawn with the catheter. Whether the tidal urine had been voided previous to catheterization, I believe he did not state. I was therefore much interested to learn his method of proceeding in his use of the catheter in these cases. I presume he has fully set this forth in his article on renal tuberculosis, read before this Association at its last meeting and recently published in the *New York Medical Journal*. On page 452 of that journal, Volume LXV, No. 14, I find recorded his ingenious catheter test for determining whether the tubercle bacilli in a given case were derived from the posterior urethra or from above that point. He says: "I drew the urine by a sterilized catheter, allowing an ounce for cleansing the eye to run off uncaught." It is clear here that the catheter was introduced into a full bladder. In the course of the same article, page 481, same journal, he says: "The use of the ordinary bladder catheter for collecting urine for critical examination, particularly when an ounce or more is permitted to flow through it before making the collection, reduces to a minimum the chance of getting contamination from the glans penis, vulva, urethra, or seminal vesicles; but even the precaution mentioned does not wholly eliminate the possibility of error; even while the catheter is in place, reflux from the bladder or the vesicles may occur." The contamination here referred to applies to the smegma bacillus and the tubercle bacillus by reflux from the prostatic urethra. Nevertheless, in many tuberculous bladders to allow "an ounce or more" of the urine to flow before making the collection, comes very near to the collection by catheterization of residual urine. It does not, however, appear that Dr. Brown has used the instrument with the specific intention of getting only the residual urine for bacteriological examination, and he makes no mention of an effort by him to determine the relative numbers of bacilli in the tidal and residual urines.

The discovery and identification of the tubercle bacillus in suspected cases, which alone enables us to make a positive diagnosis, is beset with

* Cases 4 and 5 have been lost sight of. The observations in both cases here recorded are first observations, from which it may be seen that the identification of the bacilli, and hence the positive pathological diagnosis, was made only by the application of the method described.

many difficulties. In many cases, the pre-bacillary stage of the urine probably lasts a long time, and this is the stage in which our efforts to stay the progress of the disease might be expected to produce the best results in arresting the destruction of tissues whose restoration is not possible. In certain other cases of tuberculosis uro-genitalis, the bacilli probably never enter the urine-stream. Such are cases presenting tuberculous foci in the substance or about the periphery of the prostate and peri-vesicular spaces. The discovery of the bacilli in the urinary sediments derived from those rare cases of testicular and funicular tuberculosis presenting no evidences of the disease in and about the prostate and vesical neck is, to say the least, doubtful. In the earlier stages of certain renal, and even urethral and vesicular affections, the bacilli are probably not present in the urinary sediments at all; and the diagnosis of tuberculous disease is not, as a rule, otherwise well supported. Later on, when the disease is well established and considerable destruction of tissue has been accomplished, other well-known subjective and objective symptoms justify a diagnosis, even in the absence of the bacilli. Nevertheless, our attention should always be directed to their discovery in the urinary sediments, and any aid, however small, tending to this end, is of value in practice.

It would be of interest to know if, in those cases of primary renal tuberculosis, before descending bladder infection has occurred, the residual urine by catheter would show such results as are here recorded. *A priori*, one may doubt if the normal bladder would entrap and hold for any considerable time an unusual number of bacilli descending from the infected kidney. I have had no opportunity to make observations bearing on this point. From the standpoint of therapeutics such observations would be of high value, because, in this instance, bladder infection might be at least much delayed, and, in certain cases, absolutely prevented. These infections are usually on the surface of the trigonal mucous membrane and about the ureteral orifices, and proper treatment would probably be of much advantage.

CUTANEOUS SARCOID.*

BY WILLIAM S. GOTTHEIL, M.D.,

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IT is no exaggeration to say that the subject of sarcoma and sarcoma-like growths of the skin is one of the most unsatisfactory in the entire domain of dermatology. Clinical features, pathological findings, and therapeutic suggestions are often confused and almost contradictory; and even the classification and nomenclature of the affections under consideration are open to question. Are these dermatoses really sarcomas in any general pathological sense at all, and what are their relations to mycosis fungoides, leucemia cutis, etc.? How many different varieties are there, and what are their essential characteristics? What are the prognoses of the different kinds of tumor growth? And what, if any, is the treatment that offers hopes of therapeutic success? These are questions to which the text-books give but lame and insufficient answers. And the clinical and pathological work of recent years, painstaking and meritorious as it has been, has not, I think, tended to clarify our ideas. Thus Unna, in his very elaborate but hardly satisfactory pathology, (1) enumerates not less than eight varieties of sarcoma cutis. Jarisch (2) adopts the same classification. Johnston's division (3) is histogenetic only, as the author admits, and is of comparatively little use to the clinician, who requires a visible and palpable differentiation for practical use. Other more recent investigators, such as Boeck (4), Breakey (5), Koehler (6), Wende (7), Sellei (8), Delbanco (9), Massei (10), Sequiera and Bulloch (11), Philippon (12), Gaucher and Sargent (13), etc., describe a case or cases under various designations, but hardly elucidate the more general questions to which I have called attention.

I have had occasion during the last few years to see six cases of sarcomatous disease of the skin. Two were only in consultation, and gave me no opportunity for extended study or microscopic examination. The other four were under my care for extended periods of time, one of them for five years; and three of them are still under treatment. I propose to record them before attempting to give any con-

* Read at the Section of Cutaneous Medicine and Surgery, of the American Medical Association, Saratoga, June 11, 1902.

clusions; and since this would exceed the limits of a single paper, I shall devote this one to the case whose provisional title I have placed at its head.

The patient, R. S., was a Russian Jew, 64 years old, well built and well nourished, and in fairly vigorous health. His internal organs presented no abnormalities save a moderate chronic bronchitis. His complexion was clear and rosy, and neither skin nor eyes showed evidences of more than ordinary senility. Though he was quite intelligent, but little of importance in the way of previous history was obtainable. The only diseases that he remembers are a syphilis which he contracted 39 years before, which was treated at Riga, Russia, where he then lived,

Fig. 1.—Macular eruptions on scalp.

and the depressed circular scars of whose tertiary manifestations were still visible upon his buttocks and thighs; and also a gonorrhea gotten in 1897, of which he cured himself.

He insisted that his skin had been perfectly clean and white until three months before the date upon which I first examined him with care, March 31st, 1901. He first noticed an itching or irritation upon the skin of the forearms, which was soon followed by the appearance of the eruption for which he came to the clinic. Examination showed the presence upon the body of two distinct sets of generalized lesions, and also of a deep ulceration upon the outer surface of the right heel. This latter, he said, came of itself a number of years ago; it had never been healed, though he had been in the German Hospital of this city for it for a considerable time, and had been subjected to all manner of treatment.

The dermal lesions were as follows:

1. A macular eruption. A large portion of the patient's body showed a closely aggregated eruption of faint, yellowish-pink macules, some of which were of a deeper hue, and a few of them distinctly brownish-black. They were most visible upon the flanks and arms, and upon his bald head (Fig. 1); there were none upon the face,

Fig. 2.--*Cutaneous sarcoid. Papulo-tubercular lesions of the wrists.*

palms or soles. The individual spots were irregularly circular, non-elevated, and some 2 to 3 millimeters in diameter. They looked like the lesions of a fading roseola, or possibly those of a faintly marked pityriasis versicolor or a lentigo. That they were not the first is proved by the fact that no luetic symptoms have been seen since he has been under observation, that the patient had indubitably had syphilis many years ago, and that the spots have remained absolutely quiescent, and are still present at this writing, some 15 months later. The entire absence of scaling, and of any trace of the characteristic fungus in sur-

face scrapings, disposes of all ideas of chromophytosis; whilst the location upon covered parts of the body renders it very improbable that the maculation is in any way allied to lentigo. He had not taken any medication at all for many years before the time of examination; hence the idea of an arsenical or other medicamentous pigmentation is untenable. Of the existence of this eruption the patient himself was entirely unaware. (Fig. 1.)

Fig. 3.—Ulceration on heel.

2. A papulo-tubercular eruption. This consisted of a very hard, circular and sometimes almost hemispherical nodules, brownish-blue to dark purple in color, and of very varying size, scattered over different portions of the body. Some were as large as a small nut or bean; but most of them were pea-sized; and the very smallest of them seemed in some cases to merge imperceptibly into the more deeply pigmented spots of the macular eruption described above. All the visible tumors were apparently seated entirely in the true skin; none of them, so far as palpation could decide, involved the subcutaneous or deeper structures, and the integument was everywhere freely movable. But careful examination revealed the presence of a considerable number of invisible, deeper, and smaller nodules interspersed among the more apparent lesions. Some of the largest tubercles gave me the impression of being flattened upon their lower surfaces, as if growth had taken place mainly in an outward direction.

The lesions numbered hundreds altogether; but of the larger ones there were only a few score. There were none upon the scalp, neck, or ears. On the face there were a few not larger than peas on the forehead above the bridge of the nose, and a single bigger one upon the left side of the latter organ. Their color was not as deep as those upon

Fig. 4.—Cutaneous sarcoid. Fully developed nodule.

the body; but the patient affirmed that they appeared at the same time, and their other physical characteristics were precisely similar to them.

On each arm there were some six or eight large lesions; but the forearms and wrists were studded with tumors of all sizes, and there were a number on the backs of the hands. The fingers were free, but the palms showed several deeply seated and uncolored small nodules.

It was on the thighs, however, that the largest lesions were appar-

ent, together with numerous invisible and deeply seated tumors. The beginnings of their projection above the surface and purplish discoloration could be plainly traced, and all the stages of tumor growth could be distinctly followed. The legs were slightly edematous, and studded with numerous lesions. The backs of the feet showed a number of characteristic, hard, purplish, and elevated nodules; and the soles were in the same condition as the palms. The trunk showed only comparatively few but fair-sized tumors.

Fig. 5.—Cutaneous sarcoid. Centre of fully developed nodule.

3. A trophic ulceration. On the outer side of the right heel was a deep, walnut-sized ulceration of peculiarly sluggish appearance. An extensive area of skin surrounding it was greatly thickened, swollen, white, and looking as if macerated. The margins of the ulceration were deeply undermined; and the base was dry, insensitive, vividly red, and glazed. (Fig 3.)

The patient's dermal lesions were practically unaccompanied by any subjective difficulties. There was a little itching where the tubercular eruption was most abundant; but even the ulceration of the heel seemed to give him little concern, and did not impede locomotion. He claimed to have had a change of sensibility in the feet for two years; to have no feeling in them. But a careful examination failed

to reveal any marked change in the tactile or pain sensibility of the parts. His internal organs were healthy, with the exception of the physical signs of the chronic bronchitis above mentioned. The excreta

Fig. 6.—Cutaneous sarcoid. Retrogressing nodule.

were entirely normal. An interesting point was the entire absence of any local or general adenopathy.

The results of the histological examination are shown in the accom-

panying photomicrographs (Figs. 4, 5 and 6). The nodules excised were beginning ones with their surrounding healthy skin; they were hardened and stained in various ways.

The new growth was found to consist of accumulations of cells of the connective tissue type, mostly round, though sometimes tending to become fusiform. Its beginnings in the perivascular lymph spaces could

Fig. 7.—Cutaneous sarcoid. Inter cellular reticulum of retrogressed nodule

be clearly seen; and as they increased in number the cells gradually enveloped the vessel in a dense mass. The younger and smaller foci were all in the deeper layers of the corium; but as they grew they invaded the papillary layer, flattened it out, and thinned the epithelium. In all the larger foci the elastic fibers had disappeared; and here also the beginnings of the degenerative process to be noted later on were evidenced by the less perfect staining of the nuclei of the new cells and the appearance of granules in their substance.

During the next few months the patient was subjected to an intensive arsenic injection treatment, which, however, was unfortunately not continuous. During a number of weeks I had him in my ward at Lebanon Hospital; and at this time the gradually increasing dosage of the 1 per cent. arseniate of sodium solution reached the daily amount of 40 drops. He stood it very well, and showed no undesirable reaction. It was impossible, however, to keep him in the hospital indefinitely, and since his discharge he has had only the necessarily irregular dispensary treatment.

It was whilst he was in the hospital that the change in the lesions to which I now call your attention was first noted. Many of the nodules, especially the larger ones, begin to get soft in their centers, and to show a marked depression upon their surfaces. Their color also changed; the purplish tint gradually faded and they began to assume a lighter brownish hue. Some of them became distinctly yellow, and a number of them actually disappeared, leaving at their sites faintly pigmented and slightly depressed areas of skin. This involution was especially marked upon the face.

The next detailed notes were made on November 27, 1901, the patient having had but very unsatisfactory treatment for a number of months. Many nodules had entirely disappeared, but a number of new ones had sprung up, or perhaps it would be better to say that a number of the deeper-seated and invisible lesions had increased in size, and had become prominent and pigmented. This was apparent to the patient himself, who called my attention to the new lesions upon places readily accessible to his observation, such as the forearm. Several of the degenerating nodules were excised for the purpose of studying the process.

The change in the microscopic appearance was marked. The granular degeneration that had been noted in the centers of the larger nodules of the older specimens had spread to all the cells; they took nuclear stains badly, but above all they were diminished in number to such an extent that a delicate intercellular reticulum was plainly visible (Figures 7, 8 and 9). This was so marked in the most advanced lesions that instead of a densely packed mass of round nucleated cells, the field was occupied by a reticulum in which comparatively few cells remained. In the larger and more superficial nodules the surface of the growth became concave instead of hemispherical, and the epidermal covering was thinned out, loosened, and sometimes partially removed. Unfortunately none of the material was fixed in Fleming or other osmic mixture, so that no satisfactory examination for fat could be made.

Since the time that these last notes have been written the patient

has still been under observation, though hardly under treatment. As the nodules have almost disappeared from his face, and the affection causes him little inconvenience, he has apparently made up his mind that it is hardly worth troubling about. The malady is apparently running a benign course, and it is a question whether the atrophy of the nodules is not a spontaneous process, and entirely independent of the treatment that he has received.

I regard the macular and papulo-tubercular lesions as different stages of one and the same process, but I must confess to uncertainty as to the nature and significance of the ulceration of the heel. It antedates the other lesions by many years, and has not, I believe, any connection with them. The case in general is a fairly exact replica of that recorded by Böeck (14), with the exception of the absence of the lymphatic enlargement which was so marked in his patient. I have therefore designated it by the same name, though the term was originally employed by Kaposi in a much more extended sense, and by Joseph for a different class of sarcomas. In any case it stands as a representative of a distinct class of dermal new growths. Morphologically they are sarcomata, but they differ from other tumors of the same name in that their growth is limited and they increase only up to a certain point; that having attained that growth they then remain quiescent or undergo retrogressive and degenerative changes; that the general health is not impaired, and that metastasis to the internal organs occurs very late if at all, and that finally these are apparently the cases in which the administration of arsenic has given good results, as reported by Köbner, Kaposi, and others. The term sarcoid is appropriate, as showing on the one hand their morphological relationships, and emphasizing their clinical differences upon the other.

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A CASE OF HYPHOMYCETIC GRANULOMA OF THE SKIN.*

BY JAY F. SCHAMBERG, M.D.,

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MRS. L. D., age 40 years, was referred to the Philadelphia Polyclinic for diagnosis and treatment. She stated that for about four weeks she had been troubled with a skin disease on the arms. For a fortnight during the time that an ichthyol ointment was employed upon the affected area no extension had taken place; after the cessation of this treatment a rapid spread began. The patient first came under the writer's observation on Feb. 24th, 1902. At that time there were present upon the right forearm two large elevated patches. One of these was oval in shape and about 4 centimeters by 2 in diameter: the other was rounded and about 3.5 centimeters by 3.5 in diameter. The surface presented mammilated elevations almost papillomatous in character. The growths were half a centimeter or more elevated above the level of the skin: they were firm to the touch, and were quite tender. The plaques were of a dull red color which hue extended to the skin immediately surrounding. Within the course of a few days a pustule developed upon the posterior surface of the arm about 3 centimeters from the round patch. This rapidly increased in size, became flat-topped and ruptured. Only a small quantity of pus was discharged; on removing the epidermal roof of the lesion it was seen that a small fungoid tumor of rapidly growing granulation tissue had almost completely filled the pustule. The center of this growth was depressed in a sort of crateriform manner, whilst the borders were

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considerably elevated. New outlying pustules were developed from time to time following uniformly the evolution just described.

One of the smaller lesions was excised under local anesthesia; the operation was hurried owing to the incomplete loss of sensation and a small border of diseased skin, obscured by blood, was allowed to remain. A few days later rapid recurrence followed. Notes made at this time read: There is a recurrence of the growth in the wound of incision, the new formation being already larger than the original mass.

Fig. 1.—Photograph of the patient when she first came under observation.

New nodules which appeared several days ago have within 48 hours become half again as large as they were. From this time on the disease continued to spread until the posterior surface was about half covered with the fungoid growths. A new patch appeared anteriorly on the radial side of the forearm. At this time the arm and hand were quite swollen and a source of considerable pain. The extension occurred despite the use of various lotions and ointments containing carbolic acid, ammoniated mercury, bichloride of mercury, etc. The tincture of iodine was painted upon the growths twice a day for some days without appreciable improvement. The writer then advised the patient to enter the

hospital and have the lesions curetted away. Intimidated by the thought of an operation the patient delayed and was in the meanwhile persuaded by a friend to use a liquid and a powder given to her for some skin disease or other. This the patient did with the result that the disease immediately began to improve. Under the continued employment of these remedies the neoplastic elevations have flattened down and at the present writing, with the exception of some thickening in one of the patches are practically well. The applications used were a powder of acetanilid and a weak solution of permanganate of potash. The

Fig. 2.—Five days later, showing new lesions.

powder had doubtless little to do with the improvement, as this was dusted on the surface, which was practically always dry. The solution of potassium permanganate contained in the bottle brought for inspection was certainly not stronger than one to four thousand. Of this a teaspoonful was added to a quart of hot water and the arm was immersed in this for about twenty minutes twice a day.

The specimens were fixed in a 5-per-cent. formalin solution, hardened in successive strength of alcohol and imbedded in paraffin. Sections were stained with Haemotoxylin-eosin, Fuchsin-picric acid, thionin, Weigertgram stain, carmine, gentian-violet, anilin, etc.

Microscopic and cultural examination.—Direct unstained smears of pus from the pustules were examined, but showed nothing of importance. Hairs from the affected region were examined under the microscope, but with similar result. The epidermal covering of the pustules were also subject to microscopic study. Cultures from the pus were tried upon agar and glucose agar without success. A growth of staphylococci was the only culture developed.

Inoculation of guinea-pig.—A fragment of the papillomatous growth about one centimeter square was torn away with sterilized forceps, placed in a test tube containing salt solution and a few hours later, under careful aseptic precautions, introduced beneath the skin of a guinea-pig. In the course of a few days a firm nodular tumefaction the size of a bean developed about the location of the tumor fragment, but this became gradually absorbed, the wound healed, and the animal showed no further evidence of local or general disturbance.

After the removal of the fragment from the arm of the patient a thick pus could be forced from the depth of the growth by pressure with the finger upon the surrounding surface.

Histo-pathology of an excised portion of the skin.—The corneous layer of the epidermis is in some places intact, in other regions it is largely absent. The malpighian stratum is greatly hypertrophied, extending in many places deep into the corium, the projections presenting a coralliform conformation. The rete is the seat of numerous abscess cavities filled with polymorphonuclear leucocytes (Fig. 1.) These are in some areas so large as to involve the entire depth of the mucous layer.

The entire corium is filled with an extensive and closely packed cell infiltration. In some areas this consists almost exclusively of lymphoid cells. In other regions there is a goodly proportion of polymorphonuclear leucocytes interspersed, while in still other portions the exudation is made up almost entirely of polymorphonuclear elements. The infiltration in some places is so dense as to obscure the fibrous stroma of the corium. Leucocytic detritus is present in some of the connective tissue cells evidencing a phagocytic process carried on by them.

The fungus is seen most abundantly in the spreading border of the tumor. In the epidermal abscesses none could be discovered. It consists of mycelial threads which take the gentian violet stain well. These threads are scattered throughout the cell infiltration in the corium. In some fields they are so abundant that twenty or more distinct elements can be counted. Some of them are wavy, but most are straight. They show in many places dichotomous branching and occa-

sionally a spore is present at the point of division. (Fig. 2.) Upon close examination under high power mycelial segments can be detected.

It is to be noted that many sections of the growth were examined without discovering the presence in them of any fungus elements. The portion of the growth used in the inoculation of the guinea-pig was not excised from the depth of the skin and may not have contained the fungus.

Fig. 3—Showing appearance five days after photo No. 1.

In 1883 Majocchi wrote an article on "a complicated form of ringworm which differs both from sycosis and kerion. This is characterized by round, flat swellings of the skin, tender upon pressure but not painful, from the size of a bean to a hazel nut and covered with normal or slightly reddened skin. The consistence is first elastic, later soft and, indeed, fluctuating simulating subcutaneous abscesses. This condition is preceded by a herpes tonsurans. Histologically the growth is a subcutaneous granuloma made up of young granulation cell tissue rich in blood vessels, between which giant cells are found, giving to the tissue the appearance of cutaneous tuberculosis."

In 1887 Campana described under the name of "Trichophytiasis,

dermica" the histological findings of a nodular elevation which was excised from an erythemato-squamous patch of trichophytosis on the scrotum. He found in the derma a few spores and some mycelial threads of the trychophyton fungus. No histological description of the excised lesion is given. It is possible that the nodule was an early stage of trichophytic granuloma.

Pelizzari (1888) reported a case of sycosis of the beard "consist-

Fig 4.—Abscesses in epiderm and cellular infiltration in corium (Zeiss apochromat. mm. 16, proj. ocular 2.)

ing of elevations of doughy consistence but with distinct softening in the center, covered with glazed, wine-red-hued skin from which the hair had been lost." Examination of the contents of the same showed in the yellowish red soft tissue juice, fragments of hairs which were penetrated with spores: the soft material was in the main made up of young granulation tissue.

Campana describes a second case of trichophytosis of the true skin, characterized by the formation of nodules which were made up of young granulation tissue and which contained giant cells.

(The above references are abstracted from the article by Pini.)

Pini (Archiv für Dermat. und Syph. 1890) describes under the title "Granuloma Trichophyticum Majocchi" three cases of *deep ring-worm* infection of the skin.

Case I. M. B., a twenty-year-old peasant girl, had on the scalp, which had been shaved, crescentic and coin-shaped patches of an erythematous-squamous herpes tonsurans: there were also present disseminated hemispherical elevations of various sizes (hempseed to hazelnut) covered with a glazed, tightly drawn, reddened hairless skin. The growths had begun eight months before. The family attributed the infection to diseased cattle.

Fig. 5.—Fungus in the cell infiltration of the corium. (Zeiss apochromat. mm. 8, proj. ocular 2.)

Case II. V. G., aged nine, a peasant lad, had upon the flexor surface of the forearm a five-franc-piece-sized patch of trichophytosis, upon which appeared a reddish, glazed nodular elevation of linear form: two or three pustules were present in the middle of the patch. A brother suffered from tinea tonsurans and kerion. Probability of origin in cattle.

Case III. C. E., a seven-year-old schoolgirl showed between the calvarium and the fossa suboccipitalis, a group of seven discrete plaques which were devoid of hair and flat, scarcely nodular. The color was wine red,—the skin smooth and shining. Palpation demonstrated a firm infiltrate which involved the entire thickness of the skin. (No bacteriologic or histologic examination of this case.)

In the first case Pini found under the microscope in the deeper

most layers of the corium an infiltration of mononuclear and polymorphonuclear leucocytes. In the center of this infiltration giant cells were seen. Trichophyton spores were found in scant number. No mycelial threads present.

In the second case isolated spores taking the saffranin stain were observed between the round cells. Pini obtained successful growths on glucose agar, glycerine agar, and acid potato. Inoculation experiments with pure cultures produced no granuloma.

Sabouraud (*Annales de L'Institut Pasteur*, June, 1893, page 527) in a study of the forms of trichophytosis with deep involvement of the skin, concludes as follows:

1. The special form of ringworm in children known as *Kerion Celsi*, the form involving the head known as *trichophytic circinate sycosis* and the variety designated *agminate perifolliculitis* are one and the same disease with merely different localization.
2. This disease is due to a special trichophyton which is able to produce this form of ringworm only.
3. Ordinarily this disease in man results from animal infection, and usually the horse is the animal from which the disease is contracted.
4. The disease in the horse is as a rule a *circinate folliculitis* similar to that in man.

Rosenbach in a monograph on *Schimmelerkrankungen der Haut* (Wiesbaden, 1894) describes a number of cases of trichophytic infection of the skin and classifies the fungi grown from them. The cases include ordinary tinea tonsurans, sycotic types, conglomerative pustular conditions and deep ringworm infections. A brief description of two of his cases is here appended.

Case I. A 31-year-old man had upon the left side of the chin a small nodule which increased in size despite treatment, developing into a circumscribed elevation, the size of a five-mark piece covered with crusts. Prompt cure resulted from curetting and thermocauterization. Extracted hairs and fragments of tissue inoculated upon nutrient agar gave rise to growths of the ringworm fungus.

Case II. A man of the same age had upon the cheek and neck about twenty pea- to thaler-sized, confluent nodules, some of which had developed into suppurating infiltrations. The disease healed only after 2½ months' treatment. The trichophyton fungus was recovered in culture.

Rosenbach remarks that superficial and deep forms of trichophytosis may result from one and the same form of fungus. He states also

that the clinical appearances of the deep ringworm infections may vary considerably.

Hartzell published (*Jour. of Cut. and Gen. Urin. Dis.*, Nov., 1895, page 455) under the designation of "A Unique Case of Agminate Folliculitis of Parasitic Origin" a case of deep-seated trichophytosis of the skin. A man aged 32 had upon the leg a number of palm- and coin-sized, bright red, uneven, coarsely granular, elevated plaques containing small openings from which there exuded by slight pressure a sero-purulent fluid. New outlying lesions always began as pustules. Itching and pain were prominent symptoms. The disease appeared to have its origin in a pustule which developed upon a wound produced by a fall upon a sharp stone. Central involution occurred in the largest patch. There was evident involvement of the hair follicles. Microscopically the sections showed abscess cavities in the epidermis containing pus cells and epithelium in addition to a few spores and mycelial threads. The greatest changes were in and around the hair follicles: these were enlarged and distorted and presented large angular cavities filled with round cells, round and oval spores and an abundance of mycelium. The mycelium in some sections extended a considerable distance into corium. The fungus presented all the characteristics of the trichophyton although the individual elements were larger than usual. No cultures or animal inoculations were made.

Duhring and Hartzell (*Amer. Jour. Med. Sci.*, March, 1895, page 283) describe a case of follicular hyphomycetous disease of three years' duration occurring upon the side of the neck of a lad of fifteen years of age. The eruption consisted of several patches of papular and papulo-ulcerative lesions, arranged in a crescentic manner and bearing a resemblance to a verrucose lupus vulgaris. The case differed considerably in its clinical appearance from the preceding one, but presented the same changes under the microscope. Similar inflammatory alterations were noted in and around the hair follicles, and the same kind of fungus was present in the tissues.

The cases above referred to present rather divergent clinical features. The most common types of deep trichophytic infection of the skin are those which belong to the groups of "agminate folliculitis" and "kerion." These cases are by no means rare and are seen from time to time by most clinicians. A greater interest attaches to those cases which present a distinct neoplastic appearance, for these may at times be regarded as malignant growths. They not infrequently present a papillomatous aspect which may suggest a resemblance to tuberculosis cutis or blastomycetic dermatitis.

I am not willing in the case reported to make positive affirmation.

as to the trichophytic nature of the fungus found in the tissues, although the morphologic resemblance is strong. Owing to the failure to identify the parasite by cultural tests I have preferred to report the case under the title of "hyphomycetic granuloma."

AN INSTRUMENT TO DIAGNOSTICATE HYDROCELE.*

BY FREDERIC GRIFFITH, M. D.,

New York,

Surgeon, Bellevue Dispensary; Fellow of the New York Academy of Medicine.

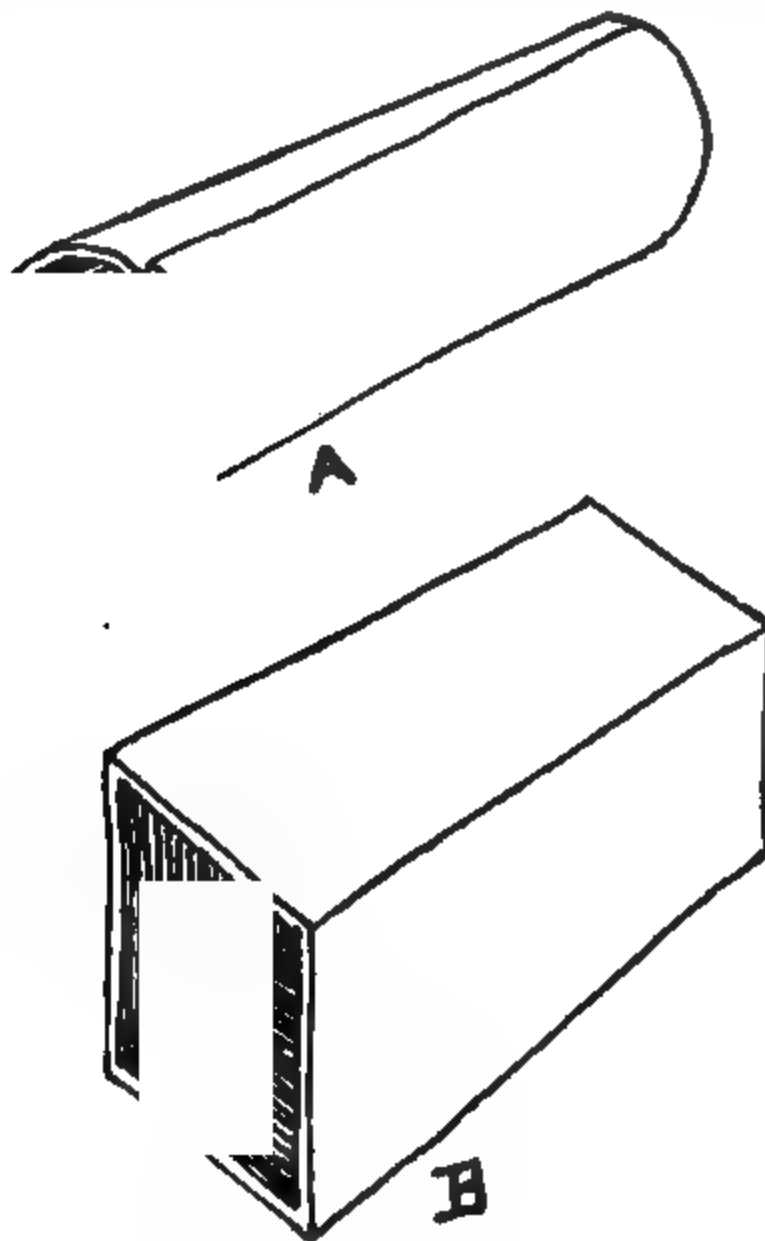
THE surest method of diagnosticating hydrocele is that by transmitted light, translucency being pathognomonic of this condition save for the few instances where the fluid becomes too darkly stained by blood pigment or when the tunic is greatly thickened.

To simplify this valuable procedure, which many clinicians neglect to employ, apparently owing to the difficulties involved, namely, that of securing a dark room, the author has devised what may be termed a hydrocele opera-glass.

The implement may be made of sheet cardboard or as improvised in the first instance in which I employed it by reconstruction of an adhesive plaster roll box, six inches long by three inches square at the ends, covered with black labeled paper (B). By slitting one edge with a sharp knife after removing the ends I was enabled to reverse the sides, forming a black interior and by the application of a few straps of plaster the box was held tight along the divided edge. This gave me an open-ended dark chamber which, when a lighted candle or taper was held in position with the scrotal tumor between it and the box end, with my eye at the other, I was able to clearly outline the scrotum contents. A later form (A) and one which I think will be more satisfactory for use is that of an open-ended hollow cylinder of pasteboard. Cut to a size of 6 inches by 8 inches from moderately heavy board, this when rolled and margin left for pasting makes a roll of handy size, 2 inches in diameter by 6 inches long. Before rolling the inner side must be blackened; this may be done by pasting a sheet of black paper or better, as it is more readily obtained, black muslin lining may be used, cut to size, or a coat of stove-black applied directly will give a dull finish black.

* Presented at the Genito-Urinary Section of the New York Academy of Medicine, April 16, 1902.

By having one of these instruments neatly made up on hand, at little cost, or improvised for the occasion, the surgeon will be grati-



fied by the results of its use when making a study of a case of suspected hydrocele.

805 Madison Avenue.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Programme of the Twenty-sixth Annual Meeting, to be Held at Hotel Bellevue, 23 Beacon Street, Boston, September 18, 19 and 20, 1902.

Officers for 1901-1902: President, George Thomas Jackson, M.D., of New York; Vice-President, Joseph Zeisler, M.D., of Chicago; Secretary and Treasurer, Frank Hugh Montgomery, M.D., of Chicago; Council, George Thos. Jackson, M.D., Joseph Zeisler, M.D., Francis J. Shepherd, M.D., Hermann G. Klotz, M.D., Frank H. Montgomery, M.D.

FIRST DAY, THURSDAY, SEPTEMBER 18.

Business Meeting (with closed doors) at 9 A.M.

Report of Council: Nomination of officers for the ensuing year; appointment of Auditing Committee; report of the Committee on Nominations; proposals for active and honorary membership; miscellaneous business.

Morning Session at 10 A.M.

1. Address by the President, Dr. Geo. Thos. Jackson.
2. Cases of bullous dermatitis following vaccination, Dr. J. S. Howe.
3. An unusual case of epidermolysis bullosa hereditaria, Dr. G. W. Wende.
4. Four forms of generalized exfoliative dermatitis. (Erythrodermies, exfoliantes, généralisées, Besnier), Dr. J. T. Bowen.
5. A critical review of L. Philippon's proposed reform of dermatology, Dr. H. G. Klotz.
6. A case of pellagra, Dr. S. Sherwell.

Evening Session at 8 P.M.

7. Report of the committee on nomenclature.
8. A clinical study of 450 cases of nail affections, Dr. C. J. White.
9. The clinical aspect and treatment of some affections of the fingernails, Dr. F. J. Levisseur.
10. Note on the histology of herpes zoster, Dr. S. Pollitzer.
11. (a) A preliminary note on the frequency of pompholix in New Orleans; (b) a case of blastomycosis of the skin, Dr. I. Dyer.
12. Another instance of a disease caused by a fungus, Drs. D. W. Montgomery, Howard Morrow and H. A. L. Ryfkogel.
13. A case of cutaneous blastomycosis followed by laryngeal and systemic tuberculosis, Dr. F. H. Montgomery.

SECOND DAY, FRIDAY, SEPTEMBER 19.

Business Meeting (with closed doors) at 9 A.M.

Report of Treasurer and Auditing Committee; election of officers; election of active and honorary members; selection of time and place of next meeting; miscellaneous business.

Morning Session at 10 A.M.

14. General discussion: acne vulgaris; (a) etiology and pathology, Dr. T. C. Gilchrist; (b) symptoms and treatment, Dr. G. H. Fox.
15. The dermatoses occurring in exophthalmic goiter, Drs. J. N. Hyde and E. L. McEwen.
16. Dermatoses of the insane. Report of an examination of 1200 inmates of the Long Island State Hospital, Dr. J. M. Winfield.
17. Report of the Committee on Statistics.

Afternoon Session at 3 P.M.

(Harvard Medical School Building, 688 Boylston Street).

18. Structure and mode of formation of the smallpox pustule. Lantern-slide demonstration, Dr. W. T. Councilman.
19. The value of radio-therapy in cutaneous and other cancers. Illustrated with lantern slides, Dr. C. W. Allen.
20. Radio-therapeutic observations, Dr. J. Zeisler.
21. A further report on naevocarcinoma, Dr. A. Ravogli.

THIRD DAY, SATURDAY, SEPTEMBER 20.

Morning Session at 10 A.M.

(Medical Library Building, 8 Fenway). Exhibition of patients.

At the afternoon session on Friday there will be an exhibition of photographs, microscopical and other preparations, to which all members are invited to contribute, and of the Wigglesworth Collection of Baretta models. Members are requested to append a brief description to each article exhibited.

The attention of members is called to the ordinance of the association requiring that any member who shall read a paper before the association shall place a copy of the same in the Secretary's hands at the time of reading.

In case of unavoidable absence from the meeting, papers announced should be forwarded to the Secretary.

Book Reviews.

La Pratique Dermatologique. Edited by Messrs. BESNIER, BROcq and JACQUET.
Paris: Masson et Cie., 120 Boul. St. Germain. 1902. Tome II.

This volume is as large as the first. It contains 1058 pages with 21 colored plates and 168 figures in black and white. The typographical appearance and paper are really above all praise. There is one fault, prolixity, which certainly grows no less with our Gallic brethren and which will of necessity prevent systematic reading of these articles, a compliment they fairly deserve. It is hard to see how any busy man can manage to peruse the flood of literature which deals with skin affections.

Eczema.—After reviewing his great subject historically, Besnier plunges into a disquisition, illuminating enough, but difficult to give any idea of. The difficulty will be appreciated when it is learned that treatment alone covers a space of 150 of these large pages. He thinks that, to the word *eczema*, should be added *eczematization*, the first indicating a morbid entity, the second, an objective syndrome. It is far from easy to put the distinction into practice, but in the main it seems to be (I may be doing the author an unwilling injustice) that *eczema* appears without provocation while *eczematization* is never autonomous. Both are amicrobic, even when *eczematization* is secondary to parasitic "epidermodermatitis," the term Besnier uses to indicate site as well as process. This underlying condition is one of irritability and lessened resistance to excitation from within or without, in the affected skin. Predisposition plays a large part. Arthritism is at the bottom of all *eczemas* called diathetic. The word has the definite meaning Bouchard describes as disorders of nutrition. In seborrheic *eczema*, idiosyncrasy is quite as great a causative factor. It has the same di-

visions as true eczema. The author thinks that the cardinal difference between true eczema and seborrheic lies in the depth of the initial process, the latter beginning on the surface. Three bacteria occur in seborrheic eczema symbiotically, but there is no adequate proof of a peculiar pathogenicity.

Electricity considered by Brocq and Bissérié is admirably full as to details of technic and apparatus. Many Americans will disagree with them on the question of failure of advance in the handling of X-rays. Methods are not perfect, but nearly enough so to warrant extensive use.

Epithelioma by Darier is disappointing in that it is not so complete as one might expect in a work of this sort. He makes several varieties of the ordinary squamous celled growth. Rodent ulcer and adenoid epithelioma are included. He treats only of secondary carcinoma, leaving the troubled nevus growth to another article.

Thibierge includes under artificial eruptions, those due to occupation, drugs, gastro-intestinal disturbance and to malingering. The illustrations are admirable and the text in keeping. Bodin goes a little out of his way in his article on erythema to include rubeoliform and relapsing scarlatiniform eruptions when Brocq, whose work in this line is so well known and so much appreciated, takes up the whole matter a few pages further on. Dubreuilh has divorced *esthiomène* from its former meaning and uses it to indicate chronic vulval ulceration with hypertrophy of neighboring parts.

Sabouraud has, according to his growing habit, included nearly everything in the skin with pus in it under the heading of *folliculitis*, from tar acne and artificial eruptions to impetigo. Technically, the stand is correct; practically, the artificial divisions previously erected are useful and reference is in no way simplified by such treatment of a topic. This is the worst fault of systems. His statement that superficial folliculitis is due to the golden staphylococcus in pure culture is not worthy of serious consideration. The article on *impetigo* a little further on repeats his views previously printed in the *Annals*.

Leredde feels called on to erect a class of hematodermatitis, meaning thereby diseases which may be due to toxic agents acting on hematopoietic or leucopoietic organs, e.g., "dermatitis herpetiformis of Dühring-Brocq." (There are no discoverable apologies to Tilbury Fox for that appellation.)

Thibierge's *ichthyosis* is remarkably well done even in the midst of so much excellence. Like other authors of late he separates fetal from post-natal ichthyosis entirely. The reason for his inclusion of epidermolysis bullosa is not patent. Dubreuilh gives thorough consideration of *symmetrical keratodermias* and this volume is closed by Bénard's equally praiseworthy article on diseases of the tongue.

JAS. C. JOHNSTON.

Society Transactions.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

Wednesday Evening, April 17, 1902.

JOHN VAN DER POEL, M.D., *Chairman.*

Epicystotomy for Tumor of the Bladder.—DR. WILLY MEYER.

DR. MEYER.—This patient, now 65 years, came under my care last year for an intermittent hematuria, which had existed for the last four years. He first discharged clear urine and towards the end a few drops of pure blood were pressed out. He had no pain at any time. When I saw him he urinated every 2 or 3 hours during the day, never during the night. He had a right inguinal hernia and a very marked chronic bronchitis. Of course in a case like this everybody would make use of the cystoscope; so did I. In looking into his bladder I saw one of the most beautiful pictures I had ever seen in the 15 years I have practiced this method. There was in the fundus of the bladder posteriorly and to the left of the mouth of the left ureter, about $\frac{3}{4}$ of an inch away from this mouth, a tumor the size of a cherry with an irregular surface, attached at its base as it appeared to me not by a thin, but rather by a broad pedicle. Such a picture is for a cystoscopist, of course, one of frequent occurrence. But there was in the center a dark blood coagulum adhering to the surface of the tumor and from the tip of one of the filaments, swinging to and fro in the injected boric acid solution, I could watch an active hemorrhage from a very fine artery. I could see the blood spurting out exactly synchronous with the pulsations of the heart and then slowly diffuse itself with the injected water.

The diagnosis of tumor had been surmised; of course nothing else but epicystotomy was indicated. I had first thought in a case like this to make use of the operating cystoscope. But I must confess, Mr. Chairman, although I am in possession of Nitze's as well as Casper's operating cystoscope, I still would prefer to do in a case like this radical work, viz.: open the bladder above the pubes and remove the tumor. So on the 9th of March last I opened the bladder by the suprapubic route. As I said before, the patient had a distinct chronic bronchitis. This induced me not to put him under general, but under spinal anesthesia. At the last meeting of the New York State Medical Society in October I reported on about 50 cases of spinal anesthesia I had done; whenever I made use of it I did it on clear indication. I used in this case the ordinary amount of cocaine—2 centigrams, and had a most perfect analgesia. I used the transverse skin and fascia incision and then opened the bladder by a rather long cut, in order to get thorough access. I found the tumor of exactly the shape and in the place previously diagnosed. Then I hooked the bladder wall with two single bladed rongeur forceps and pulled it right into the wound

in order to have full access to the pedicle. It could be very readily seen that two blood vessels ran through the vesicle wall to the base of the tumor. These were primarily surrounded by a catgut ligature with the help of a round needle, because I have frequently seen in vesical operations that after the pedicle is thoroughly extirpated or removed in some other way there is quite some profuse arterial hemorrhage. I think that by means of the method just mentioned, I avoided such an occurrence. Then I used that method which I prefer in operating for tumors of the bladder which have not a small pedicle. I used the covered Paquelin cautery knife and lifted out the base of the growth in connection with about $\frac{1}{2}$ inch of the bladder wall. There was no hemorrhage. No further ligation was necessary and I could proceed to give proper attention to closing the bladder. I think that wherever a wound has been made with the actual cautery, it is better to drain, not to close it entirely by sutures and drainage with the permanent catheter introduced through the internal meatus, or as others might prefer through perineal incision. I have seen in one case continuous spasms in spite of large doses of morphine and decided never again to suture entirely if I had made a large wound with the Paquelin cautery. I used the method of Kader, as proposed by him for making a gastric fistula watertight and lately recommended with regard to vesical suprapubic drainage by Dr. C. L. Gibson of this city; that is to say. I first closed the vesical wound by a double row of catgut sutures up to a small hole, through which the drainage was introduced, which in turn, was surrounded by a double fold of the vesical wall, with the help of silk sutures. Then the outer wound was closed as far as it could be done and the pre-vesical space drained by a small strip of gauze. The man, after having overcome the fever so often seen following spinal anesthesia, (lasting 48 hours), made a good recovery. I removed the tube at the end of the first week. After this the whole wound closed rapidly, there being no leakage whatever. I saw the patient again a few days ago and he stated to me that he now urinates about 5 times in 24 hours and not at all during the night. The water is entirely clear; he never passed blood again. This specimen is preserved in alcohol. It has shrunk somewhat; it still shows nicely how the bladder wall had been shelled out with the Paquelin cautery. The man did not wear a truss for his inguinal hernia, as I ordered him to do. I am happy to say he has no additional hernia as a result of the incision. Microscopical examination showed the base of the tumor to be cancerous and the other part papylomatous. I have not examined the patient with the cystoscope again. I had no chance to do so. I may mention another case of cancer of the bladder where I have removed a tumor very similar to this one, in 1890, although the base was a little bit broader than the one here removed, in a man then 54 years old. For ten years I considered that case my star case, because there was no recurrence. In 1900, ten years after the operation, recurrence set in. When I saw him again his bladder was filled with carcinomatous masses. He was operated, also under spinal anesthesia. He died a few months later from chronic pyelonephritis. Such a case proves how careful we must be with our prognosis in cases of this class.

Hypertrophy of the Prostate, Cured by Bottini's Operation.—

DR. WILLY MEYER presented a patient on whom he had performed the Bottini operation.

I had the good luck of seeing this patient again four years after the opera-

tion, after not having been able to examine him during this entire time. I think that if anybody presents a case of this kind before a gathering of medical men, it is due to them that he make an exact statement with regard to the former history and compare his former condition with the present one.

S. F—, fifty-two years of age. In August, 1896, after ingestion of a great deal of ice-cold liquid, he first experienced trouble in micturition. A physician advised sounding and irrigation of the bladder. Infection followed, also inflammation of the right testicle. There was a call for micturition every half-hour to one hour day and night. At one of our public hospitals vesical irrigation was carefully carried out for many weeks. In December the right testicle was removed. After the operation the patient was somewhat improved. The frequency in micturition decreased and the urine cleared up. But in April, 1897, recurrence of the former symptoms with considerable pain in the suprapubic region set in. Urination occurred about every forty-five minutes; dysuria was present. Little improvement followed, though the bladder was continually washed for a whole year.

When I saw the patient on April 28th, he urinated every fifteen to thirty minutes in the daytime; nights every hour to an hour and a half. With some effort he passed at my office 150 c.c.; residual urine, 175 c.c. The catheter, left within the bladder, after the latter had been thoroughly irrigated until the water returned clear, soon gave exit to a small amount of turbid urine. There surely existed pyelitis. The prostate on rectal palpation was found to be equally enlarged in both lateral lobes, and sensitive. Its upper border could be reached. As a result of urinary analysis a diagnosis was made of secondary hyperemia of the renal parenchyma or more marked lesion; chronic cystitis without alkaline fermentation. Cystoscopy showed a large prostate, trabecular bladder; probably pyelitis on the left side, as the urine expelled from the left ureteral opening appeared cloudy.

May 7th, Bottini's operation was performed at the German Hospital.

The first two days following the operation the patient felt very much benefited. Whereas he had had to get up during the night every hour to an hour and a half to urinate, and that always with pain, micturition now was at once rendered easy. Thus the report of the night from the 18th to the 19th of May was: The patient voided urine voluntarily between 10 and 11 P.M.; next between 3 and 4 A.M.; and next at 6 A.M. Using the patient's own words, he "certainly passed the best night for the last twenty months." On the third day the traumatic irritation of the gland began to produce greater frequency of micturition; then incontinence appeared for a short time, most prominent during sleep. There was no vesical irrigation; urotropine was administered internally. A short time after the operation the patient left the hospital. He had no further local treatment. On June 15th he reported at my office. He urinates every hour and a half to two hours during the day, but he could wait longer if he wished; during the nights, he waits about three to four hours; at times he has to strain rather long before the bladder is completely emptied. The former pain has disappeared. He feels and looks better, and has gained in weight. On September 22d he stated as follows: In July and August he was in the country, where he became much improved. He now urinates three to four times during the day, once or twice during the night. He passes at times 300 to 360 c.c. He voided at my office 175 c.c. of clear, gold-yellow urine, with residual urine, 125 c.c.; 250 c.c. of boric solution was

injected into the bladder and afterward passed voluntarily, without pain or trouble, in a good, strong stream, up to the very mark of the graduated glass. October 24th, the same good condition continued. He urinates from four to six times in twenty-four hours, and believes that, with some patience, he always empties the bladder. He passes 325 c.c. of perfectly normal urine within about two minutes; residual urine, 75 c.c. Of 350 c.c. of two-per-cent sterilized boric solution then injected he discharges 225 c.c. in a forcible uninterrupted stream, and then, with two short intermissions, 125 c.c. more. Not a drop is retained.

I did not see him again until lately. He told me that he passed water 3 or 4 times during the day and not at all during the night; feels entirely well. Now I want you to see how he urinates and I hope he will do us the favor. I presented this patient a short time ago before the Surgical Society, because, I think, one patient cured proves more as to the value of an operation than 100 failures. I did not want to catheterize him before the audience, on account of maintaining asepsis, so the Surgical Society appointed a committee of one, in the person of Dr. F. Tilden Brown, to come to my office and be present when I catheterized the patient. This I did a few days ago, when the patient passed 375 c.c. in a short strong stream and the catheter found 5 c.c. in the bladder; then 300 c.c. of Ichthargan 1 to 5,000 were injected; he passed 280, so 20 c.c. remained. That means to say his residual urine is about 1 oz. to 1½ oz.

I think if a patient, who had all the symptoms of an enlarged prostate and consequent troubles, passes perfectly clear water three or four times in 24 hours, not at all during the night, without any trouble or straining, and has a residual urine of about 30 to 50 c.c., we have a full right to pronounce such a case cured. I think such a case is of great importance inasmuch as a great number of our colleagues have claimed that Bottini's operation can *not* cure a patient with a prostatic hypertrophy. If this case which I just happened to reach can be presented as cured, the demonstration of cure by Bottini's operation has been successfully done, and the claim is properly founded. Of course it is easy to explain why surgeons prefer prostatectomy to galvanocautic prostatotomy. In hospital cases I decidedly prefer prostatectomy.

If patients operated upon by Bottini's method do not remain under our care for three weeks, and are treated by orderlies, if need be for regular catheterization and irrigation, there will probably be more failures than cures; and furthermore, at the end, it is many times more simple to do prostatectomy on a patient than to perform Bottini's operation. If we have done prostatectomy successfully, our work is done and every house surgeon and assistant can attend to the patient if necessary. In the Bottini operation it is entirely different. I have never had so much work on patients, day and night, as I have since I have done Bottini's operation. It may be due to the personal attention which I give to these cases; but that is, I think, the principal cause of my success in these cases, but also one of the causes why surgeons are so much adverse to doing Bottini's operation. The point to be emphasized here is: Galvano-caustic prostatotomy must become a recognized radical operation for the relief of hypertrophy of the prostate. We all must know and must recognize that we have two treatments with regard to the cure of hypertrophy of the prostate,—prostatectomy and Bottini's operation. To prove unmistakably induced me to bring this patient here to-night.

DR. FREDERIC GRIFFITH presented a case of apparent cure of hydrocele by the employment of the drop method and gave the history as follows: D. R., male, aged 45 years, a groom by occupation, is married and father of ten children.

Denying all venereal infection he came to me in February last presenting the signs of hydrocele upon the left side of the scrotum. The patient had been tapped for a similar condition one year ago and again four months previous to his first visit to me. Under antiseptic precautions I tapped and drew off 16½ fluid ounces of the typical hydrocele fluid. By means of a hypodermic syringe I injected one drop of pure carbolic acid, following the suggestion of Dr. Coley, with a result obtained which seems most satisfactory. The secondary inflammation which marks the success of injection treatment for hydrocele was pronounced in this case, lasting several weeks, though the patient was enabled to continue at work through the entire treatment. He now presents a condition of the parts but little changed from the normal. I am impressed by the difficulty in removing all of the fluid from the sac in these cases, so essential in treatment by minute quantities of the injecting fluid.

A point in the diagnosis of hydrocele which is invaluable, though not sufficiently employed, is that of study by transmitted light. Owing to the difficulty of securing a dark room for the study of these cases surgeons neglect to employ this means. To overcome the inconvenience of this requisite I would like to show an instrument, simple in construction, which allows the diagnosis of hydrocele to be made with facility. By means of a roll of paste-board or an open ended box similar to the holder for rolled adhesive plaster. Placing the scrotum between the candle light and the end of the roll or box end, with the observer's eye at the other, a dark chamber is obtained which will demonstrate translucency of the scrotum, if present.

Winkelmann's Operation for Hydrocele.—DR. VAN DER POEL.

The only point I would make as regards this case is that I left a small rubber tissue drain in the lower angle of the wound extending upward for about an inch, instead of closing it entirely, there being primary union throughout; and in consequence of this, by means of granulation, I think the union between the anterior surface of the testes and the subcutaneous tissue is stronger. Ordinarily the testes will adhere to the subcutaneous tissues as it is brought up against them, but in this way, it is a little more apt to do so, and there will be a little less chance for a recurrence of the fluid.

Koehler's Operation for Varicocele.—DR. VAN DER POEL.

Koehler's modification for operation for Varicocele is simply where the radical operation of removal of a section of the veins is done and the skin incision is united transversely instead of in the original longitudinal direction. In this case, the stumps of the ligated and excised veins were also united. The lower angle of the wound was then made to approximate the upper angle, and a V or wedge-shape piece of skin removed from either end latterly, to make approximation better. This results in a transverse wound, and gathers up a considerable portion of the scrotum, which in this case was unusually long, and when combined with the suturing of the stumps, will often do away with the necessity of ablation, which we not infrequently have to do in these cases.

DISCUSSION ON DR. MEYER'S CASE OF EPICYSTOTOMY FOR TUMOR OF THE BLADDER.

DR. GOLDENBERG.—I would like to ask Dr. Meyer if he prefers epicystotomy to the intravesical operation in every case of tumor of the bladder. I am inclined to think that one with the great skill that Dr. Meyer possesses in cystoscopic work cannot be deterred from intravesical operations by the difficulty which he expects to encounter, but presume that his reason for not doing

so is due to the fact that he is afraid of relapses. I ask this question because Dr. Nitze in Berlin in course of a correspondence I had with him some time ago assured me that from his large experience—he had up to that time operated on 75 cases of tumors of the bladder—relapses are rare and certainly not more frequent than after epicystotomy.

DR. FULLER.—I consider that Dr. Meyer did right in opening the bladder suprapubically, removing the entire tumor and resecting a bit of the bladder about the base of the pedicle. I do not think snaring or scraping away these growths by means of one of the various operating cystoscopes sufficiently radical. Many of these growths which primarily appear histologically benign after a lapse of time either develop malignant characteristics, or, are followed by cancerous vesical manifestations. I recently performed a perineal prostatectomy through the employment of spinal anesthesia most satisfactorily. In this instance a lung lesion rendered the giving of a general anesthetic undesirable.

DR. VON GLAHN.—Dr. _____ of the Necker Hospital, published a small pamphlet a few years ago on the statistics of the evident results of operation on tumors and showed that in the Necker Hospital for the average of 5 or 6 years it would have been much better to have left the patients alone. They all died as soon as if they had all been left alone. They all had recurrence.

DR. GOLDENBERG.—I beg leave to take issue with what Dr. Fuller has stated. In the first place, Nitze's operation is a thorough removal of the tumor with cauterization of the base.

In the second place, as to the relapses after operations on tumors of the bladder, performed at the "Hôpital Necker," the report from this hospital does not refer to intravesical operations but to the usual surgical procedures for tumor of the bladder.

DR. VAN DER POEL.—Last summer, in Berlin, through the kindness of Dr. Knorr, I had the good fortune to cystoscope a case, of about the same age as Dr. Meyer's from whom, a papilloma of the bladder had been removed with the electric snare, by means of the Nitze operating cystoscope, some six months previous, on account of hemorrhage. After removal, the base had been cauterized. Examination had shown the growth to be of a benign nature, but I found that it had returned, and was at the time I saw it about the same size as before operation, though the bleeding had as yet not recurred. I have a photograph of the recurrence as it appeared when I saw it, and cite the case to show that recurrence does occur after the snaring operation, even after the base had been cauterized.

DISCUSSION ON DR. MEYER'S CASE OF HYPERTROPHY OF THE PROSTATE, CURED BY
BOTTINI'S OPERATION.

DR. FULLER.—The result in this case seems very satisfactory. The patient urinates absolutely freely and empties his bladder. There is a point or two however to bring about the case. One would have a right to question how much of the obstruction in this instance was due to inflammatory tumefaction rather than to senile hypertrophy. The man is rather young for senile hypertrophy. If I remember rightly, the history Dr. Meyer gave was that the retention came on suddenly and had not been preceded by symptoms of obstruction. In most instances of obstruction from senile hypertrophy the obstructive symptoms develop more gradually. In this case the inflammatory trouble with the testicle

might lead one to infer a like condition of the prostate. I have in mind numerous instances of men in the early fifties, or younger, who as the result of a debauch, have suddenly developed retention and who after a short period of catheterization, have again recovered the function of urination as perfectly as in this instance, as the result entirely of expectant treatment.

Every one I think admits that the Bottini operation is applicable only to certain selected cases and cannot be used at random in all forms of prostatic obstruction. Prostatectomy is applicable to all cases and when properly performed the results from it are very satisfactory. Dr. Meyer has done much with the Bottini operation and has accomplished brilliant results in numerous instances.

DR. SWINBURNE.—I agree with what Dr. Fuller has said and think it would be interesting if these cases operated on by the Bottini method with greater or less success, can be followed for a number of years, to know whether the residual urine which they now have and which is slight is likely to increase through further hypertrophy or congestion. This patient is able to urinate easily and there is no question about the benefit received, but whether such cases are liable to a further hypertrophy which will in the future cause further trouble is an important question.

There is no question, as Dr. Fuller says, that some of these cases with acute retention, go on without further trouble for a number of years after they get relief by catheterization a few times, and then gradually have the symptoms of hypertrophy or obstruction come on.

DR. GOLDENBERG.—I do not want to take any sides with either the Bottini operation or prostatectomy, having no personal experience with either operation; but I would say that in a number of cases of hypertrophy of the prostate that I had the opportunity of observing for a number of years, good results were obtained and maintained by conservative symptomatic treatment, viz.: Regular catheterization and irrigation of the bladder. I like to mention one case in particular, because Dr. Meyer had seen this case with me in consultation. It was a patient seen 4 or 5 years ago, with absolute retention, in whom in spite of all aseptic and antiseptic precautions, every catheterization was followed by severe chills and general malaise. This patient was catheterized at regular intervals and passes now clear urine with perfect ease. I catheterize him about once a month, because he does not empty his bladder entirely, but the amount of residual urine is very small, the urine clear, micturition easy and the patient is free from all subjective symptoms.

DR. MEYER.—The use of Nitze's operating cystoscope certainly is very tempting to a man who is used to deal with this kind of cystoscopy. I have used Nitze's operating cystoscope, but was often annoyed by our inability to wash the lens and prism clear of blood. No arrangement has been made in the instrument to do this. If a small blood-clot has settled on lens or prism and irrigation through the tubes does not remove it, we are obliged, at present, to remove the whole instrument from the bladder, clear it, irrigate the viscus and reintroduce. The size of that cystoscope is a pretty large one,—about 26, French scale. From all I have seen in other cases, where a very thorough removal of a vesical tumor had to be done surgically, I think that the chances for the patient are infinitely better by opening the bladder. The fact is well known, that the base of a papilloma is often carcinomatous. I think I will use the operating cystoscope in exceptional cases only, where we are absolutely sure that the papillomata is benign, including its pedicle. Casper's operating cystoscope I have not tried so far. Certainly both Nitze's as well as Casper's

are very ingenious and will forever keep an important place in the instrumentarium of a cystoscopist.

With regard to recurrence I should like to say that in the majority of cases of cancer of the bladder there is unfortunately a recurrence. And yet, if we have seen patients remain entirely well, as I have mentioned before, for 9 years, after extirpation of a cancer of the bladder, enjoying life, as I think has been the case in the patient operated on by me in 1890, and another one of my patients with a large carcinoma of the bladder, verified by microscopic examination, now still enjoying good health six years after suprapubic extirpation, I think certainly the chances are in favor of extirpation.

The majority of these cases come too late for operation. The family physician must make it his duty to have the diagnosis as to the source of the bleeding promptly settled in every single case of hematuria.

With regard to the second cystoscopy, Mr. Chairman, some time after operation, I would like to ask whether you have seen the recurrence in the same place where the operation had been done?

CHAIRMAN.—The recurrence was in the same place.

DR. MEYER.—I have seen many cases of papillomata which sprang up rather quickly in the neighborhood of the seat of the primary disease.

CHAIRMAN.—I did not see the original tumor, yet Dr. Knorr told me the recurrence was in the same place. I saw the recurrence.

DR. MEYER.—I think that multiple vesical papilloma in a great many cases must be considered of malignant type, akin to papillomata of the larynx.

Now in regard to the second case—that of Bottini's operation, I cannot expect you to listen to all I would like to say on the subject. I first want to mention that this patient had no after treatment whatever. He represents a somewhat exceptional case, in that a patient who had not been treated later should have such a clear urine. I have, however, a number of cases of Bottini's operation besides this one where that has occurred; but I must also say that the majority of these patients need prolonged after-treatment to overcome the catarrhal condition of the bladder. Very few will submit to it. They disappear soon after leaving the hospital to clear up their urine.

I would venture to differ with Dr. Fuller with regard to the rarity of the first symptom of hypertrophy being sudden retention. Amongst quite a number of my cases the very first symptom of the presence of an enlarged gland, hitherto unknown to the patient, was retention. That happens, I think, frequently. I certainly have seen it very often, and this was the case in my own patient. I want to say that all the pathognomonic clinical symptoms of enlarged prostate were fully developed in this case. The cystoscope showed the body of the prostate bulging into the lumen of the bladder; there was at the neck of the bladder, visible through the cystoscope, that deep furrow, proving, according to Nitze's first demonstration of this class of diseases, that this was a true hypertrophy; and furthermore, he had a marked trabecular bladder. An inflammatory process of the prostate would not produce such a marked thickening of the detrusor muscle. I have never seen this trabecular condition of the bladder except there exists a true chronic mechanical obstruction to the outflow of the urine. The continuous pressure of residual urine in cases of prostatitis also is not seen. It is found in cases of prostatic abscess only. This patient was infected by continuous irrigation and during after treatment developed an abscess of the testicle, for which the latter was removed. I can further say, gentlemen, that on massaging the prostate in this patient not a drop of prostatic fluid was dis-

charged from the external meatus. There can, therefore, not be the slightest doubt that this was a true case of prostatic enlargement and that the patient was entirely cured by means of Bottini's operation.

With regard to suffering: not every patient suffers. A number do suffer, but we can relieve their suffering immensely by regular catheterization and irrigation. Suffering exists in many instances of this class of cases with regard to the attending surgeon. He must be alert and must expect more trouble than if he had done prostatectomy. If he goes and simply gives after the operation his orders to the house surgeon and tells him to go ahead as he thinks best, the percentage of deaths after the Bottini operation will be more than five to eight per cent., the usual percentage of fatalities after this operation.

Dr. Fuller states that he has about the same result in cases of prostatectomy. Whether he would venture to tackle a man of 90 or 92 years with prostatectomy I don't know. (Dr. Fuller: 81). But a patient at 92 has been successfully operated on by means of Bottini's operation. I am absolutely sure that in spite of the dexterity we can acquire during the course of years in prostatectomy we can not enucleate a soft prostate, a prostate which after having been hooked can be fully compressed. I now have had more than 60 prostatics operated with prostatotomy. Amongst them was quite a number of cases where I was amazed at the compressibility of the gland. If I had not seen the gland with the cystoscope before, if I had not myself previously felt the enlarged gland per rectum, I would then and there during the operation have claimed that there did not exist hypertrophy. It will be pretty difficult to enucleate such a gland and yet just in these cases you may have a good result with Bottini's operation. If I had a case of fibrous enlargement, a hard prostate, even if the patient be 74 or 76, I would do prostatectomy, eventually, under spinal anesthesia. Certainly that is the best way to get rid of a tumor, which we can remove just as well and much more easily than we are used to shell out an enlarged thyroid gland. I was very pleased to hear the remark of Dr. Fuller, namely, that Bottini's operation was applicable to a certain number of cases of enlarged prostate. He did not admit this a few years ago. The point, always to be emphasized, is, that there are now two operative procedures to cure or at least alleviate the troubles of prostatics, without regard to their age: prostatectomy and Bottini's operation.

DISCUSSION ON WINKELMANN'S OPERATION.

DR. BERG.—There have been recently reported a number of recurrences, I think four, after the Winkelmann operation.

DR. MARTIN W. WARE.—This operation, generally credited to Winkelmann, was originally devised by Doyen and Jaboulay, both of Lyons. It was subsequently taken up by the surgeons of Paris and modified. The difference in the two methods is that the Lyons school practices a decortication, whereas the Parisian school does not do this at all.

I have twice done this operation, but the time elapsed is not sufficiently long to pronounce its being absolutely successful, although reports show that there are a number of recurrences.

DR. MEYER.—Have you seen many cases of inflammation of the kidneys following this operation.

DR. VAN DER POEL.—I have not.

DR. MEYER.—I have seen it in a number of cases.

DR. VAN DER POEL.—You mean this operation I did here.

DR. MEYER.—I mean resection of the vas.

DR. VAN DER POEL.—Yes, that I have seen.

Non-Gonorrheal Urethritis.—JAMES C. JOHNSTON, M.D.

Urethritis is divided by the author into a number of classes according to their etiological factors. In each class, an illustrative case was given in detail,

I. *Pseudogonococcic or Catarrhal Urethritis.*—Onset insidious. Incubation period longer than in gonorrhea, two to eight days. Discharge slight. Subjective symptoms almost absent, resembling a recurrent gonorrhea. Duration, 8-10 days. There is no posterior involvement and no sequel. A cardinal feature is the marked tendency to recurrence. The organism is probably identical with Heilmann's pseudogonococcus and Pfeiffer's micrococcus catarrhal. It is rounded, occurs in pairs of which the numbers are unequal in size, is generally extracellular, decolorizes with Gram, but grows in white opaque colonies on ordinary media, as well as serum agar.

II. *Uric Acid Urethritis.*—This is a purely irritative inflammation, caused by the sharp points of the crystals, present in the urine in quantity. Duration and incubation indefinite. Pain and amount of discharge considerable. Subsides under appropriate treatment.

III. *Streptococcic (?) Urethritis.*—A single case to which some doubt attaches since some of the organisms decolorized by Gram. They were intra- and extracellular diplococci. The only cultures obtained gave the streptococcus in a pure state. The disease ran an unusual course. Although there had been no previous urethritis, there was no sign of virulence, discharge slight, no pain, no posterior inflammation, incubation five days. Discharge disappeared after seven days of irregular treatment, but began again and continued for four weeks, with the same character. Two weeks after the urine was absolutely clear, the patient developed a slight bursitis at the elbow and an arthritis at the wrist which lasted only a few days. The diplococci in smears were extra- and intracellular. The cultures showed no colonies of gonococci and smears from them, typical streptococcic chains. Goldberg has reported a urethritis from the same cause.

IV. *Staphylococcic Urethritis.*—One case; staphylococcus albus recovered in pure culture. Contagion was traced to the mouth of a prostitute as in the French cases. Discharge, which was slight, appeared after three days and was purulent, contrary to Malherbe's observation, by which it was determined to be sero-sanguinolent.

V. Lastly, there are certain cases which suggests, may be called *toxic*, in which the infection lies in bladder, prostate or kidney. The discharge is purulent and free from organisms. It is intermittent and not painful. One case of author's seemed to depend on a cystitis, the infective agent being Friedlander's pneumobacillus.

It should be remembered that all the typical cases occurred in urethras previously free from disease.

DR. SWINBURNE.—I agree with Dr. Johnston's statements very thoroughly. I saw several of these cases and have seen very similar cases myself, and the main point is the fact that they are cases with primary urethritis. Usually young men with their first attack of urethritis are not seen early in the disease, nevertheless there are men who on contracting the slightest discharge and for the first time in their lives, want to consult someone who can give them good advice, and I have seen in the last few years a large number of cases coming within the first 24 hours of their primary discharge and the study of these cases has been a very interesting one, although I am sorry to say that has not been con-

ducted with culture tests as well as microscopical examinations; and as far as the last case mentioned by Dr. Johnson as the aseptic is concerned, I think that he simply meant that such cases simply show no micro-organisms and not that there was not something underlying either deeper in the urethra, in the bladder or the prostate, which caused this aseptic urethritis. In fact, that is, I think what one should do. He should seek to know what the source of infection is and be extremely suspicious of an aseptic discharge, for most frequently I think he will find its cause in the posterior urethra, the prostate, or the bladder.

DR. GOLDENBERG.—I have been listening to Dr. Johnston's very interesting paper with great delight. The most practical and important conclusion I draw from this paper is that in the future we cannot rely on the ordinary tests for gonococci, not even on the culture test with serum agar. For if other cocci which cause a clinical picture similar to the one in gonorrhoeic urethritis grow in the same manner as Neisser's diplococcus it will be necessary in order to identify the coccus as the gonococcus, after a positive result on serum agar, to sow it on ordinary culture media on which the gonococcus, as a rule, does not grow.

DR. FERD. C. VALENTINE.—I confess that reading the title of Dr. Johnston's paper evoked some doubt. Non-gonorrhoeal urethritis, called by some aseptic inflammation, certainly could not be offered for discussion except to urge the great value of abstinence from treatment. The scientific views so ably presented, however, come as a revelation, although they emphasize in a better manner than I could the results of my personal experience. It is the danger of deciding erroneously in a case which presents no microscopic cause for the discharge in which the value of cultures is particularly emphasized. This is especially the case in that ever-increasing number of former patients who come for an examination, as a preliminary to consent of marriage. I am glad to avail myself of Dr. Johnston's paper to emphasize the need of repeated cultures before one gonorrhoeic. The subject as presented by Dr. Johnston is too vast for unprejudiced positively decide upon the permissibility of marriage in the case of an expiated discussion. I anticipate, with pleasure, the benefit and privilege of studying this valuable contribution to science, when it is published.

DR. F. TILDEN BROWN.—I was much interested in Dr. Johnston's paper, I have no data of sufficient accuracy to add anything but general comments, one of which is that we could do much to increase the prestige of this section of the academy and much to confirm or dispel our existing views regarding the contention of the admirable paper we have just heard, if in the future we would present every case of suspected pseudo gonorrhoea at the earliest possible date after recovery, so that all may have the chance of observing the condition at each stage and of studying the case by his own microscopical and bacteriological methods. It would be of interest to see how many cases would be presented to this section in the course of a year, and accepted by its experts, as belonging to the infectious but non-gonorrhoeal type. I have seen not more than a dozen such cases, but more of these were ones where the micro-organisms resembled Neisser's Diplococcus in Morphology, staining, or cellular arrangement sufficiently to be confounded with it. I do not wish to contend that there are not in existence cases where nothing short of culture tests can permit a differential diagnosis, but it is the speaker's impression that he has not yet had the fortune to meet one, while on the other hand he feels that the error he has made several times of failing to detect gonococci in cases of urethritis is much more common than that of mistaking a pseudo gonorrhoea for one of the specific type.

DR. MARTIN W. WARE.—I have listened to Dr. Johnston's paper with a great deal of interest because I, too, was on the lookout for these so-called non-specific urethritides and the bacteria held presponsible for them, but after systematic examination of a large number of cases I have come to the conclusion that they are almost non-existing in bona fide urethritis. I do not place any reliance on the formal statements of my patients. I am very strongly influenced by the clinical appearance of the case. For the cultivation of the gonococcus I have found the Wertheim medium to be very practical. This consists of an ordinary slant of agar on whose surface there is spread a thin layer of human blood abstracted from one's own finger under aseptic precautions. This medium is then placed in the thermostat for 24 hours to make sure that it is absolutely sterile.

Concerning the bacteria found by Dr. Johnston, the question comes up whether these organisms are parasitic or pathogenic, since any organism which is specific enough to produce a distinct type of urethritis must conform to the postulates of Koch. This is our attitude in the instance of the gonococcus. If we credit to other bacteria the properties of provoking a distinct urethritis, behaving in all respects clinically like gonorrhœa, we are simply taking a step backward and despoiling the gonococcus of its specific property. The urethra, as we all know, harbors a host of bacteria, and it is therefore incumbent upon us to be able to exclude the fact that these organisms have not wandered into the urethra from the prostate, bladder and adjoining viscera. Thus I recall an instance in which I encountered in a urethral discharge a capsule bacillus in an old gentleman afflicted with enlarged prostate. The latter organ was the source of this capsule bacillus. On the other hand, if we find the bacillus coli in the urethral discharge, we cannot attribute the infection to the female, whose vagina normally harbors the coli.

As to an aseptic urethritis I fail to understand the possibility of its existence since even the normal urethra at all times contains an extensive flora of bacteria.

In conclusion, to demonstrate how specific an organism the gonococcus is, I wish to cite a case of a young boy, whose urethral discharge was the source of much speculation for several days. He was but 6 years of age and no venereal contact could be elicited. With the lapse of time a calculus was discovered in the deeper portion of the urethra. While the discharge persisted all this time, instantly following its removal it may be said to have ceased. In the pus of this discharge we found preponderating staphylococci, which casual observations might easily have credited as being responsible for the urethritis; but the removal of the mechanical cause of irritation put an end to the discharge. With the gonococcus present we certainly know the discharge would have persisted.

DR. VAN DER POEL.—I would like to reiterate what Dr. Brown has said in regard to the presentation of specimens. It would be far more instructive and interesting not only to the section, but to the general profession, if preparations and cultures could be brought here and exhibited to the Section. It is undoubtedly some trouble to bring microscopes, but I think the result would thoroughly warrant the trouble that was expended in so doing.

DR. JOHNSTON.—If I remember my remarks correctly I have said nothing about an aseptic discharge. I suggested that it might be called toxic. The case I saw was one in which the bladder was infected with the bacillus of Friedlander. These cases are not aseptic. The posterior urethra, the prostate, the bladder and the pelvis of the kidney are generally all infected at once. It may be that it is the toxins which, according to Albarran's theory, irritate the urethra exactly as uric acid does in uric acid urethritis.

With regard to my cases we were not any of us born yesterday. We know just how much human testimony is to be depended upon even when people are trying to tell the truth. I deliberately selected these cases from private patients and from personal friends, men whom I knew. It is extremely unlikely, knowing the importance of the history in cases of gonorrhea, having had it explained to them that they would hardly conceal from me the fact that they had had previous gonorrhea, so I am as fairly certain as we can be from any human testimony that we are dealing with urethras previously unaffected. If you cannot believe these people we cannot believe anyone.

With regard to animal inoculation with these organisms, it is a well known fact that the organisms which prey upon the human body do not prey upon the lower animals; that dogs and rabbits are not susceptible to these effects. It is all very well to demand that all postulates of Koch shall be fulfilled in these investigations. It would be just about as easy to demand that the tubercle bacillus should be inoculated upon the human skin and lupus vulgaris produced. There is a certain limit, gentlemen, to investigation and the limit comes when you reinoculate an organism into the human body. The time will not come, I will venture to predict, when that will ever obtain, so that in the interim we shall have to do the best that we can without it; but when you have a series of 8 cases where you recover not a variety of organisms but one single organism which decolorizes with Gram, but grows upon all media, we may be very fairly sure we are dealing with a specific bacterium, which in all probability stands in close etiological relationship with the discharge. The clinical symptoms in the case are just as clearly marked as the morphology of the parasite. This I need not review any further.

With regard to culture Dr. Goldenberg is entirely correct. It is not enough to cultivate any urethral organism upon a medium which contains human serum. It must be seen whether it grows upon ordinary medium also. These organisms grew on ordinary media. The gonococcus does not. With regard to the case of streptococcic urethritis you notice how closely that photograph represents the picture in the early stage of an acute gonorrhœa of a paired coccus partly discolorizing with Gram. If the gonococcus was present, its growth was completely choked off from this beginning and the cultural bacteria showed chains only. The clinical course was certainly not that of a first gonorrhea.

We are not telling the world anything new, in saying that all that runs is not gonorrhea. It is perfectly well known and these cases ought to be, it seems to me, determined in future when this question of marriage comes up. If you are not dealing with gonorrhea your patient may get married. He may transmit this catarrhal infection to his wife, but it will do her no harm, as the gonococcus would. It may get up a leucorrhea, but will not cause the unfortunate sequels common in blenorrrhea of the female genitals.

With regard to the presentation of such cases it is a pretty difficult matter. These investigations are not such as can be carried on in public practice, and private patients will not be exhibited. Cultures and smears might be but the former are rarely characteristic and the latter as deceptives, even with Gram.

As to the Gram method itself everybody knows what it is. It varies somewhat in different hands, but the essentials remain the same, variation occurring chiefly in the length of time the solutions are allowed to act. I use it as Finger does.

Selections.

GENITO-URINARY DISEASES.

Intra-Peritoneal Rupture of the Bladder.—By JAMES PEDERSEN, M.D. (*N. Y. Medical Record*, March 22, 1902, p. 475).

Pedersen reports a case in which intra-peritoneal rupture of the bladder occurred as the result of a fall from a window. A small quantity of blood at the meatus directed attention to the possibility of bladder injury, and in the course of examination, seven ounces of boric solution, injected for diagnostic purposes, were lost, showing extravasation. Suprapubic cystotomy was performed nine hours after the injury, and on opening the peritoneum a transverse rent in the bladder was found, two and a half to three inches long. The edges of the wound were brought together closely, with a continuous suture of chromicised catgut. The membranous urethra was then buttonholed, and a 35 F. perineal drainage tube was inserted through it into the bladder.

Examination of the penile urethra for strictures was negative; but a meatotomy was performed, owing to a narrowing at the meatus, for the purpose of relieving the bladder of all unnecessary strain in voiding the urine. The patient made an uneventful recovery.

A. L. W.

Prostatectomy by the Perineal Route.—By PARKER SYMS, M.D. (*Annals of Surgery*, April, 1902, p. 467).

Prostatectomy performed through the perineum without opening the bladder suprapubically, is safer than the procedures which do involve suprapubic cystotomy. There is less cutting, less time involved, and the danger of infection which would arise from exposing the prevesical space to the contaminating influence of infected urine, is avoided. After the operation, drainage is carried on entirely through the perineum and in the line of gravitation.

The author's proposed modification of Alexander's operation, namely, that a laparotomy should be performed just above the bladder fold but not opening this organ, whereby one might push the prostate, bladder and all, towards the perineal wound, he never put into practice (for reasons not stated); but an important modification of this proposition by Alexander Johnson, has been successfully carried out since October, 1899. He makes an opening into the prevesical space below the peritoneal fold, whereby he can introduce the finger without opening the bladder.

As a further aid to perineal prostatectomy, the author calls attention to his "bladder retractor." It consists of a rubber tube having a calibre of 38 French, with a rubber bulb attached to one end, which can be dilated by the introduction of two and a half ounces of water, after it has been introduced into the bladder. The method of using this retractor is described in detail.

An instrument devised by J. W. S. Gouley, as a further aid to perineal prostatectomy is also described. It is like a double curved bladder staff with an expanded flat distal extremity. It is introduced through a previously made opening in the membranous portion of the urethra, into the bladder, and is used for making counterpressure from within. Syms believes it will be found to be a valuable aid in many cases.

The after treatment of perineal prostatectomy is simple. A drainage tube is inserted through the opening into the membranous urethra into the bladder, and is retained in position by one stitch. All the wound is carefully packed around this tube, the bladder being kept clean by repeated washings, and emptied by continuous drainage. On the fifth to seventh day the drainage tube is removed and the patients are usually out of bed by the seventh to the tenth day. During the healing process the anterior urethra must be irrigated frequently, and as soon as the wound has begun to fill up with granulations, a full sized sound should be introduced into the bladder, at first every three days, afterwards at more frequent intervals. This is continued for from three to six weeks.

The author has thus far done thirteen prostatectomies, with satisfactory results. Prostatectomy should be done early and not as a last resort, the perineal route being the safest method thus far proposed.

A. L. W.

Suprapubic Cystotomy in Operations upon the Bladder.—By HOWARD LILIENTHAL, M.D. (*Medical Record*, Jan. 18, 1902, page 88).

Lilienthal reports seven cases in which he performed suprapubic enucleation of the hypertrophied prostate, with one death, one failure, and five complete cures. He urges that as a general rule, with few exceptions, the first step in the operative cure of any form of prostatic obstruction, should be a suprapubic cystotomy, even if it should later become evident that the disease itself must be attacked from some other quarter. It is the only way in which certain information as to the condition of the bladder can be obtained.

The value of the cystoscope for this purpose is limited, and in certain forms it cannot be used at all. Galvanocautic prostatotomy (Bottini), unless preceded by suprapubic section involves the risk that serious bladder lesions may exist unknown, which may nullify the expected benefit. The additional advantage of bladder drainage is also obtained by the operation, when cystitis exists. A case is mentioned in which cystoscopy was impossible, owing to excessive hemorrhage. Diagnosis of possible hypertrophied prostate was made. Suprapubic cystotomy, made for exploratory purposes, revealed a carcinoma of the prostate. The tumor was curetted, with satisfactory result, for some months. The suprapubic wound healed quickly.

If a prostate, on examination through the bladder wound, is very soft and hyperemic, or of such texture that it cannot be enucleated, one has the choice of the Bottini operation, or of removal with the cutting forceps by conjoined manipulation. In any case, the bladder opening is of the greatest value. The bleeding is much less than with perineal section, shock is comparatively small, and the operation takes but a few minutes.

A. L. W.

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Original Communications.

PRESIDENTIAL ADDRESS: THE AMERICAN DERMATOLOGICAL ASSOCIATION, AND ITS WORK DURING ITS FIRST QUARTER OF A CENTURY.*

BY GEORGE THOMAS JACKSON, M.D.,
New York.

GENTLEMEN: It gives me peculiar pleasure to preside over this meeting of our Association, because it was in this city thirteen years ago that I first attended a meeting of the Association.

But, alas, my pleasure is mixed with pain, a pain that most of you must share with me when you recall the circumstance that in 1889, when we met here before, the incumbent of the Presidential chair was our loved and lost friend, Dr. J. E. Graham. He was one of the best of men; warm of heart; clear of head; genial, loving, and to be loved. Little did I then dream that so soon he would die; he was so ruddy of countenance, apparently the picture of perfect health.

Dr. Graham was born in Brampton, Ontario, Canada, in May, 1847. His preparatory education was gained in the Weston Grammar School and the Upper Canada College. He graduated from the Toronto School of Medicine in 1869 at the head of his class, receiving both the University and the Starr gold medals. From Toronto he went to Brooklyn, N. Y., and became one of the resident physicians on the staff

* Delivered at the meeting of the American Dermatological Association, Sept. 18, 1902.

of the Brooklyn City Hospital. He subsequently studied medicine in Vienna and London, taking the degree of L.R.C.P., London.

He returned to Toronto in 1872 and began the practice of his profession. In 1875 he was appointed physician to the Toronto General Hospital. At about that time he became connected with the Toronto School of Medicine as Demonstrator of Anatomy and Microscopy. Subsequently he held the position of Lecturer on Chemistry. In 1887 he was made Professor of Clinical Medicine and Medical Pathology, and Lecturer on Dermatology. In 1892 he became Professor of Medicine.

In 1884 symptoms of diabetes showed themselves. The disease so impaired his health that he devoted himself more and more to the work of a consultant. In 1893 he left Toronto for a time, took up his residence in London, and gained the degree of M.R.C.P., London.

This brief sketch of Dr. Graham's life shows that he was a hard student, devoted to his profession, and worthy of all the honors and emoluments that were heaped upon him.

In 1873 he married Mary J. Aikins. To them were born three daughters and one son.

In 1899, when he felt that he could not live long, he resigned from our Association because he did not believe in belonging to any organization in which he could not do his full share of work. In that year he went south for his health, and was taken with influenza while in Baltimore. Unfortunately this was followed by slight pulmonary tuberculosis, which, engrafted on a system already greatly weakened by diabetes, was rapidly fatal. He died in Muskoka, Canada, on July 6, 1899, in the fifty-third year of his age. He was survived by his widow and four children. His son is a member of our profession. May his career be as honorable as his father's!

I am glad that it has so chanced that I stand here in the place in which he once stood, if only that I might put on record in our Transactions this sketch of his life and this expression, all inadequate though it is, of the esteem in which we all held him.

It is a remarkable fact that in the first quarter of a century that this Association has existed only three active members have died, namely: Dr. H. C. Hand, of St. Paul; Dr. E. Wigglesworth, of Boston, and Dr. R. B. Morrison, of Baltimore.

Dr. Hand I never knew. He was one of the original members of the Association, and died so early in its history that there appears a resolution upon his death in the first number of our Transactions in 1877. I am told by one who knew him well that he was a man of sterling character and fine attainments.

Dr. Edward Wigglesworth was one of those who signed the call that wakened our Association into life in 1876. Had he done nothing else that would have been a cause for lasting gratitude on our part. But he did much more. He was vice president of the Association from 1879 to 1881, and president from 1885 to 1886. He contributed three papers to our Transactions, and took an active part in our discussions. He attended our meetings regularly, and his genial manner added much to their success on the social side. His death was the first sad break in our ranks, and there was not one of us who did not mourn for him.

Dr. Wigglesworth was born in Boston on December 30, 1840. After receiving his preliminary education in Chauncey Hall and Latin Schools he entered Harvard College, from which he was graduated in 1861. From there he passed to the Harvard Medical School, from which he graduated in 1865. Being possessed of ample means, he studied in Europe for five years after gaining his diploma, returning to this country in 1870. From then until he died he practiced his profession in Boston, devoting himself to dermatology. For many years he was one of the physicians for diseases of the skin to the Boston City Hospital. He was a member of a number of medical societies, among which were our own Association and the Boston Dermatological Club. He was also a corresponding member of the New York Dermatological Society.

He was married in 1882 to Sarah Willard Frothingham, who, with his two children, survives him.

He died on January 3, 1896, in Boston, of apoplexy following Bright's disease, in the fifty-sixth year of his age.

Dr. Robert Brown Morrison became a member of this Association in 1884. He was its vice president from 1886 to 1887, and its president from 1893 to 1894. He contributed six papers to our Transactions, and like Dr. Wigglesworth added greatly to the success of our meetings by taking part in the discussion of papers. His death in 1898 is so recent that nearly all of you knew him, and to know him was to like him, for he was a thoroughly likable man. He was the soul of hospitality, and when we think of our meeting in Baltimore we recall his indefatigable and successful efforts to make it enjoyable.

Dr. Morrison was born in Baltimore on March 13, 1851. His preliminary education was received in Phillip's Academy, Exeter, N. H., from which in 1869 he went to Harvard College. He did not graduate in Arts, but went from Cambridge to study in Göttingen before taking up the study of medicine. He received his degree in medicine from the medical department of the University of Maryland. After a few years

of practical experience he went to Europe in 1882 and studied dermatology in Prague, Vienna, Hamburg and Berlin.

He was the first one to hold the chair of Dermatology in the Baltimore Polyclinic. He resigned this to become Clinical Professor of Dermatology in the University of Maryland, a position that he filled with distinction until 1889, when he received the high honor of being appointed Clinical Professor of Dermatology in the Johns Hopkins University, which he held until his death.

In 1878 he married Miss E. H. Williams, who, with his two daughters, survives him.

He died in September, 1898, in the city of his birth, of Bright's disease, in the forty-eight year of his age.

By his will he gave to the Johns Hopkins Hospital his valuable medical library.

Since last we met in this city Drs. Graham, Wigglesworth and Morrison have died. We who knew them can but miss them while we meet here to-day.

The American Dermatological Association was founded in 1876. Its birthplace was Philadelphia, and it was the child of six fathers, namely: Dr. L. D. Bulkley and George H. Fox of New York, Dr. L. A. Duhring of Philadelphia, Dr. E. Wigglesworth of Boston, Dr. I. E. Atkinson of Baltimore, and Dr. L. P. Yandell of Louisville. These gentlemen sent an invitation to some fifty physicians in the United States who were interested in the subject of dermatology and syphilis to join with them in forming a national association for the study of those subjects.

It has seemed to me that an historical sketch of the Association during the first quarter of a century of its life just completed would be interesting and valuable. By the time the next quarter of a century is passed many of us will be but memories. But the Association will not die, and I venture to hope that a future historian will arise who will bring our history down to 1926.

The original members of the Association were I. E. Atkinson of Baltimore, W. Brodie of Detroit, A. Brooks of Hot Springs, T. R. Brown of Baltimore, L. D. Bulkley of New York, S. C. Bussey of Washington, R. Campbell of New York, H. F. Damon of Boston, W. H. Draper of New York, L. A. Duhring of Philadelphia, G. H. Fox of New York, H. C. Hand of St. Paul, W. A. Hardaway of St. Louis, C. Heitzmann of New York, J. N. Hyde of Chicago, B. J. Jeffries of Boston, E. L. Keyes of New York, F. F. Maury of Philadelphia, J. A. Ochterlony of Louisville, H. G. Piffard of New York, A. R. Robinson of New York, C. J. Smith of Chicago, R. W. Taylor of New York, A.

Van Harlingen of Philadelphia, R. F. Weir of New York, F. D. Weisse of New York, J. C. White of Boston, E. Wigglesworth of Boston, and L. P. Yandell of Louisville.

It is evident that even at its beginning our Association was a representative one, its members coming from all parts of the United States. From a study of our records it is impossible to discover how many of the original members qualified. Five have resigned, five have been dropped for non-attendance, two have died, seven are unaccounted for, and ten are still active members.

The Association organized in 1876 by electing J. C. White, president; L. A. Duhring, vice president; L. D. Bulkley, secretary; and J. N. Hyde, treasurer.

The first annual meeting was held at Niagara Falls on September 4, 5, and 6, 1877. Every year since then the Association has met. There were present at the first meeting Drs. Atkinson, Brodie, Bulkley, Campbell, Duhring, Fox, Hardaway, Heitzmann, Hyde, Taylor, Van Harlingen, White, Wigglesworth, and Yandell. All of them except Dr. Brodie read papers.

A number of prominent European dermatologists were asked to take part in the proceedings of the first meeting, and many of them sent letters of congratulation upon the founding of the Association. Dr. Duckworth of London, sent a paper on the treatment of severe bed sores.

During the first twenty-five years of our existence we have been presided over by nineteen presidents, namely: James C. White from 1876 to 1878, and from 1896 to 1897; Louis A. Duhring from 1878 to 1880; James N. Hyde from 1880 to 1882 and from 1897 to 1898; Robert W. Taylor from 1882 to 1884; William A. Hardaway from 1884 to 1885; Edward Wigglesworth from 1885 to 1886; Henry G. Piffard from 1886 to 1887; Isaac E. Atkinson from 1887 to 1888; James E. Graham from 1888 to 1889; Prince A. Morrow from 1889 to 1890; Francis B. Greenough from 1890 to 1891; Edward B. Bronson from 1891 to 1892; George H. Fox from 1892 to 1893; Robert B. Morrison from 1893 to 1894; Samuel Sherwell from 1894 to 1895; Andrew R. Robinson from 1895 to 1896; John A. Fordyce from 1898 to 1899; Henry W. Stelwagon from 1899 to 1900; Francis J. Shepherd from 1900 to 1901. It will be observed that Drs. White and Hyde have served three terms as president, and Drs. Duhring and Taylor two terms each.

From 1876 to 1887 we elected two vice presidents every year; since then only one each year. Twenty-five of our members have served as vice presidents, namely: Louis A. Duhring from 1876 to 1877 and from

1896 to 1897; Robert W. Taylor from 1876 to 1877; Carl Heitzmann from 1877 to 1878 and from 1880 to 1881; Lucius D. Bulkley from 1877 to 1878; James N. Hyde from 1878 to 1879; Samuel Sherwell from 1878 to 1879 and from 1888 to 1889; Edward Wigglesworth from 1879 to 1880 and from 1880 to 1881; William A. Hardaway from 1879 to 1880 and from 1881 to 1882; George H. Fox from 1881 to 1882; Isaac E. Atkinson from 1882 to 1883 and from 1885 to 1886; Andrew R. Robinson from 1882 to 1883 and from 1885 to 1886; James E. Graham from 1883 to 1884 and from 1884 to 1885; Arthur Van Harlingen from 1883 to 1884 and from 1884 to 1885; Francis B. Grenough from 1885 to 1886; Robert B. Morrison from 1886 to 1887; Prince A. Morrow from 1887 to 1888; George H. Tilden from 1889 to 1890; Le Grand N. Denslow from 1890 to 1891; Francis J. Shepherd from 1891 to 1892 and from 1895 to 1896; Henry W. Stelfwagon from 1892 to 1893; George T. Jackson from 1893 to 1894 and from 1899 to 1900; John A. Fordyce from 1894 to 1895; Edward B. Bronson from 1897 to 1898; John T. Bowen from 1898 to 1899; Douglas W. Montgomery from 1900 to 1901. It will be observed that Drs. Atkinson, Duhring, Graham, Hardaway, Heitzmann, Jackson, Robinson, Shepherd, Sherwell, Van Harlingen, and Wigglesworth have served two terms each.

From 1876 to 1887 it was the custom to elect each year a secretary and a treasurer. After 1887 the two offices were held by one officer, who is known as the secretary and treasurer. During the twenty-five years there have been only nine secretaries, five of whom have discharged the duties of the double office.

Lucius D. Bulkley was secretary from 1876 to 1877, one year.

Robert W. Taylor was secretary from 1877 to 1879, two years.

Arthur Van Harlingen was secretary from 1879 to 1883, four years.

W. T. Alexander was secretary from 1883 to 1885, two years.

George H. Tilden was secretary from 1885 to 1889, four years. During the last two years he was also treasurer.

George T. Jackson was secretary and treasurer from 1889 to 1893 and from 1898 to 1899, five years.

Charles W. Allen was secretary and treasurer from 1893 to 1896, three years.

John T. Bowen was secretary and treasurer from 1896 to 1898, two years.

Frank H. Montgomery was secretary and treasurer from 1899 to 1901, two years, and is still the incumbent of the office.

The office of treasurer, when that office existed by itself, was held by five of our members, namely: James N. Hyde from 1876 to 1877,

one year; Isaac E. Atkinson from 1877 to 1882, five years; George H. Rohé from 1882 to 1886, four years; Le Grand N. Denslow from 1886 to 1887, one year; H. W. Stelwagon.

Up to 1891 the council consisted of the retiring president and the other officers of the society. In 1891 it was determined to elect each year a member-at-large to the council. The following ten members have served in that capacity: George H. Fox, 1891 and 1892; James C. White 1892 and 1893; John A. Fordyce, 1893 and 1894; P. A. Morrow, 1894 and 1895; John T. Bowen, 1895 and 1896; Edward B. Bronson, 1896 and 1897; George T. Jackson, 1897 and 1898; Andrew R. Robinson, 1898 and 1899; Thomas C. Gilchrist, 1899 and 1900; James C. Johnston, 1900 and 1901.

During the first twenty-five years of our existence we have had eighty members on our rolls. The names of the original members have been given already. I now give the names of those elected since 1876, with the years in which they were elected:

In 1877, W. H. Geddings of Aiken, S. H. Durkee of Boston, F. P. Foster of New York, S. Sherwell of Brooklyn.

In 1878, F. B. Bronson of New York, F. B. Greenough of Boston, and G. Rohé of Baltimore.

In 1879, J. E. Graham of Toronto.

In 1882, P. A. Morrow of New York, H. W. Stelwagon of Philadelphia, and W. T. Alexander of New York.

In 1884, G. H. Tilden of Boston, R. B. Morrison of Baltimore, F. C. Curtis of Albany, and L. N. Denslow of St. Paul.

In 1888, J. S. Howe of Boston, W. T. Corlett of Cleveland, G. T. Jackson of New York, H. G. Klotz of New York, F. J. Shepherd of Montreal, Canada, and J. Zeisler of Chicago.

In 1889, J. T. Bowen of Boston, and C. W. Allen of New York.

In 1890, C. W. Cutler of New York, J. A. Fordyce of New York, M. B. Hartzell of Philadelphia, and J. Grindon of St. Louis.

In 1891, G. T. Elliot and L. Heitzmann of New York.

In 1892, A. Post of Boston.

In 1893, J. A. Cantrell of Philadelphia.

In 1894, S. Lustgarten of New York.

In 1895, I. Dyer of New Orleans, D. W. Montgomery of San Francisco, and J. McF. Winfield of New York.

In 1896, T. C. Gilchrist of Baltimore, and S. Pollitzer of New York.

In 1897, F. H. Montgomery of Chicago, M. B. Hutchins of Atlanta, and J. C. Johnston of New York.

In 1899, R. B. Carmichael of Washington, A. Ravogli of Cincinnati, H. H. Whitehouse of New York, and W. A. Pusey of Chicago.

In 1900, O. H. Holder of New York, G. W. Wende of Buffalo, and C. J. White of Boston.

In 1901, F. J. Leviser and H. Goldenberg of New York, L. C. Pardee of Chicago, and G. H. Harding of Boston.

It will be noticed that new members have been added to our roll every year excepting in 1880, 1881, 1883, 1885, 1886, 1887, and 1898. The banner year was in 1888, when six new members were elected. It happens that of these four are now on the council, one of them being the president of last year, one the present incumbent of that office, one our vice president, and one the member-at-large of the council.

Of those elected since 1876, the names of thirteen no longer appear on our list of members, most of them having resigned.

Besides these active members we have elected from time to time the following honorary members: Prof. T. de Amicis of Naples, Dr. T. McC. Anderson of Glasgow, Dr. E. Besnier of Paris, Dr. H. R. Crocker of London, Dr. A. Hardy of Paris, Prof. F. Hebra of Vienna, Sir J. Hutchinson of London, Prof. M. Kaposi of Vienna, Prof. Leloir of Lillie, Prof. A. Neiser of Breslau, Prof. I. Neumann of Vienna, Prof. F. J. Pick of Prague, Prof. E. Vidal of Paris, and E. Wilson of London.

By looking over the subjoined list of our places of meeting, we find that we have been migratory. We have met in eleven states and in Canada. But wherever we have met we have found that our time was pleasantly and profitably passed. Up to 1897 our whole time was given to the reading and discussion of papers. It was then considered that it would be more to our profit if we devoted one session to the examination of patients and the discussion of their diseases. This has necessitated our meeting in the large cities. As we are a part of the Congress of American Physicians and Surgeons we have met every third year in Washington since 1888.

Our places of meeting have been as follows: Niagara Falls, N. Y., in 1877; Saratoga Springs, N. Y., in 1878; New York City in 1879; Newport, R. I., in 1880, 1881 and 1882; Lake George, N. Y., in 1883; West Point, N. Y., in 1884; Greenwich, Conn., in 1885 and 1886; Baltimore in 1887; Washington, D. C., in 1888, 1891, 1894, 1897 and 1900; Boston, Mass., in 1889; Richfield Springs, N. Y., in 1890; New London, Conn., in 1892; Milwaukee, Wis., in 1893; Montreal, Canada, in 1895; Hot Springs, Va., in 1896; Princeton, N. J., in 1898; Philadelphia, Penn., in 1899; and Chicago, Ill., in 1901.

Since the founding of the Association a volume of Transactions has been published every year. Up to 1893 these consisted merely in a brief summary of the papers and a report of the discussion of them.

In 1893 the first complete volume of Transactions was published giving papers in full and the discussions, together with illustrations of the papers. This was a distinct advance. In my opinion, we should never go back to the previous style. With our large and growing membership and the dignity our age gives us, nothing short of the complete report of our meetings is worthy of us.

Three hundred and seventy-six papers have been read before our Association. The least number in any one year was five, in 1882, and the largest number was twenty-six, in 1891. In 1884 and 1893 only eight were read, and only three times has the number exceeded twenty. The average number is fifteen. These 376 papers have been contributed by fifty-three of our members. Dr. Hyde has read the greatest number of papers, twenty-one. He is followed closely by Dr. Taylor with twenty, Dr. Duhring with eighteen and Dr. Stelwagon with seventeen.

The list of names of those contributing papers is here given, followed by a numeral indicating the number of papers read. Alexander (1), Allen (10), Atkinson (9), Bowen (7), Bronson (11), Brooks (1), Bulkley (10), Campbell (1), Cantrell (3), Corlett (9), Cutler (1), Denslow (3), Duhring (18), Dyer (2), Elliot (5), Fordyce (13), Foster (1), Fox (13), Gilchrist (6), Graham (8), Greenough (6), Grindon (4), Hardaway (12), Hartzell (8), Heitzmann (12), Holder (1), Hyde (21), Jackson (7), Johnston (4), Klotz (6), Montgomery, D. W., (3), Montgomery, F. H., (4), Morrison (6), Morrow (12), Piffard (6), Pollitzer (5), Pusey (1), Ravogli (1), Robinson (7), Rohé (2), Shepherd (9), Sherwell (14), Smith (1), Stelwagon (17), Taylor (20), Tilden (3), Van Harlingen (7), Wende (2), White, J. C. (15), Wigglesworth (3), Winfield (2), Yandell (1), and Zeisler (8.)

It is noticeable that as members are elected one year they almost invariably contribute a paper the next year.

Besides the 376 papers by the members of the Association, we have listened to six papers by invited guests. Dr. Duckworth of London, sent one on Bed Sores in 1877; Dr. DeSilva Lima of Bahia, sent one on Ainhum, in 1880; Dr. H. O. Schmidt in 1881 read one on the Pathology of Leprosy; Dr. P. G. Unna of Hamburg was with us in 1887, and read a paper on The Treatment of Leprosy, Dr. C. C. Ransom of New York, in 1890 gave an account of the action of the waters of Richfield Springs, and in 1893 Dr. H. R. Crocker of London read a paper on Lupus Erythematosus.

The subjects chosen for the papers have covered nearly the whole field of dermatology. A study of the subjoined list of subjects shows

that only three papers on eczema have been read, only one on trichophytosis, and none on dermatitis seborrhoicum.

In 1891 it was determined that a subject for general discussion should be chosen by the council each year. This was another distinct step in advance and has proved most successful. Since 1897 it has been the custom to select one or more of the members to present the chosen subject in well-studied papers, and this has been another step in advance. The subjects for general discussion have been the following: Alopecia areata (1892), Pityriasis rosea and Pemphigus (1893), Electrolysis (1895), Diet and Alcohol in Eczema and Psoriasis (1896), Syphilis (1897), Lupus Erythematosus (1898), The Rôle of Pus Organisms in Diseases of the Skin (1899), Malignant Diseases of the Skin (1900), and Diseases of the Nails (1901).

A list of the subjects presented for our consideration are here given. The numeral after the subject indicates the number of papers upon the subject.

Anatomy of the skin (3); Etiology, general considerations (3), cold (1), sleep (1), imperfect or deficient urinary secretion (1); Therapeutics (35) being upon acid, carbolic and salicylic, anthrarobin, aristol, calx sulphurata, chloral, cosmetics, diet, electrolysis, epilation, goose grease, ichthyol, iodine, iodoform, intrafollicular applications, lanolin, linseed oil, mineral waters, naphthol, oleates, petroleum, pilocarpin, resorcin, Roentgen rays, rubber plasters, salt, thilandin, and thyroid feeding; Classification (2); Dermatological hints (1); Teaching of dermatology (1); Scale of measurements (1); Acne (5); Acne varioliformis (1); Adeno-carcinoma (1); Ainhum (2); Alopecia (4); Alopecia areata (3); Angiokeratoma (2); Angioma pigmentosum et atrophicum (2); Angioma serpiginosum (1); Aspergillus nigrescens (1); Carbuncle (1); Carcinoma cutis (1); Chondroma of lip (1); Dermatitis (1), blastomycetica (6), exfoliativa (2), gangrenosum (3), hemostatica (1), herpetiformis (8), malignant papillary (2), medicamentosa (1), palmaris et plantaris (1), papillaris capilitii (2), protozoic (1), traumatica (1), vegetans (1), venenata (3); Dermatoses, germ (1), glycosuric (1), immigrant (1), trophic (1); Dysidrosis (1); Eczema (3); Eczema marginatum (1); Elephantiasis (2); Endothelioma (1); Epidermolysis bullosa (1); Epithelioma (3); Eruptions, feigned (1); Erysipelas (3); Erythema elevatum diutinum (1), induratum (1), multiforme (1), nuchae (1); Erythrodermie pityriasique en plaques disseminées (1); Exfoliation of lips (1); Favus (3); Folliculitis, agminated (1); Fordyce's disease of lips (1); Fragilitas crinium (2); Gangreneopsis (1); Granuloma (1); Hand and foot disease (1); Herpes gestationis (1), progenitalis (1), zoster (2); Hydroa estivale (1), vac-

ciniforme (1); Hydroadenitis (1); Hypertrichosis (4); Ichthyosis congenita (2); Impetigo contagiosa (2), herpetiformis (4), simplex (1); Keratosis follicularis (1); Kraurosis vulvæ (1); Lepra (12); Leucemia cutis (1); Leucopathia unguium (1); Lichen planus (5), ruber (4), scrofulosorum (2), tropicus (1); Lupus erythematosus (6), vulgaris (4); Lymphangioma circumscriptum (3), tuberosum multiplex (1); Malignant disease of the skin (5); Miliaria (1); Mollusum contagiosum (57), verrucosum (1); Mycetoma (1); Mycosis fungoides (7); Myoma multiplex (1); Myxangioma (1); Nevus (7), linare (1); Nails, diseases of (3); Negro, skin diseases of (1); Neuroses of the skin (3); Papilloma cutis (3); Parasitic diseases (2); Pediculosis (1); Pemphigus foliaceus (1), vegetans (1); Pityriasis rosea (1); Plica (1); Pompholyx (1); Porokeratosis (1); Prurigo (5); Pruritis (5); Psoriasis (7); Psorospermiosis (1); Purpura (3); Rare diseases of the skin (11); Raynaud's disease (1); Rhinoscleroma (1); Rosacea (2); Rötheln (1); Sarcoma (5); Scabies (2); Scarlatinaform eruption (1); Scleroderma (5); Scrofuloderma (2); Seborrhea (1); stigmata, bleeding (1); Sudamina (1); Sycosis capitis (1); Syphilis (29); Trichophytosis (1); Tuberculosis cutis (5); Tumors, multiple of skin (2), of scalp (1); Tylosis (1); Ulcers, buccal (1), multiple cachectic (1); Ulerythema sycosiforme (1); Urticaria pigmentosa (3); Variola (1); Vitiligo (1); Xanthoma (4); and Xeroderma (2).

This long list of papers by no means represents the literary activity of the members of this Association. Besides the hundreds of papers read by our members before other medical societies and published in many medical journals both in this country and in foreign lands, and articles contributed to various systems of medicine, there have appeared fifty-eight books written by twenty of our members. By their efforts the status of American Dermatology in foreign lands has been advanced to a high plane. American text-books on Dermatology are now studied by English-speaking students in all parts of the world. Had it not been for the impetus given by this Association to the study of dermatology in this country it is fair to assume that this would have not been the case.

The books on Dermatology and Syphilis written by our members are as follows:

Bulkley, L. D. 1. Eczema and its management, N. Y., 1881; 2d Ed., 1884; 3d Ed., 1900. 2. Manual of skin diseases, N. Y., 1882, 4th Ed., 1898. 3. A treatise on acne, N. Y., 1885. Acne and alopecia, Detroit, 1892. Syphilis in the innocent, N. Y., 1895.

Corlett, W. T. A treatise on the acute infectious exanthemata, Phila., 1901.

Cutler, C. W. 1. Differential diagnosis of the disease of the skin, N. Y., 1887. 2. Lectures on dermatology, N. Y., 1894.

Duhring, L. A. 1. A practical treatise on disease of the skin, Phila., 1877; 2d. Ed., 1881; 3d Ed., 1882. 2. Atlas of skin diseases, Phila., 1877 to 1883. 3. Epitome of skin diseases, Phila., 1886. 4. Cutaneous medicine, Phila., 1892 et seq.

Fox, G. H. 1. (with Piffard) Venereal and cutaneous memoranda, N. Y., 1877, 2d Ed., 1880. 2. Photographic illustrations of skin diseases, N. Y., 1880, 2d. Ed., 1885. 3. Photographic illustrations of cutaneous syphilis, N. Y., 1881. 4. The use of electricity in the removal of superfluous hair and other facial blemishes, Detroit, 1886. 5. Photographic atlas of skin diseases, N. Y., 1897. 6. The skin disease of children, N. Y., 1897. 7. Photographic atlas of skin diseases, Physicians' edition, Phila., 1901.

Hardaway, W. A. 1. Essentials of vaccination, Chicago, 1882. 2. Manual of skin diseases, St. Louis, 1890, 2d. Ed., Phila., 1898. 3. (with Bangs) American text-book of genito-urinary diseases, syphilis, and diseases of the skin, Phila., 1898.

Hyde, J. N. 1. A practical treatise on skin diseases, Phila., 1883; 2d Ed., 1888; 3d Ed., 1893; 4th Ed. (with Montgomery) 1897; 5th Ed., 1900; 6th Ed., 1901. 2. On the affections of the skin induced by temperature variations, etc., Chicago, 1886. 3. (with Montgomery) Manual of skin and venereal diseases, Phila., 1895; 2d Ed., 1900. 4. Smallpox in Illinois, Chicago, 1900.

Jackson, G. T. 1. Diseases of the hair and scalp, N. Y., 1887; 2d Ed., 1894. 2. The ready reference handbook of skin diseases, Phila., 1892; 2d Ed., 1896; 3d Ed., 1899; 4th Ed., 1901.

Johnston, J. C. Atlas of skin and venereal diseases, N. Y., 1901.

Keyes, E. L. 1. (with Van Buren) Genito-urinary diseases and syphilis, N. Y., 1874. 2. The tonic treatment of syphilis, N. Y., 1877. 3. Venereal diseases, N. Y., 1880; 2d Ed. (with Chetwood) N. Y., 1899. 4. Genito-urinary diseases and syphilis, N. Y., 1888. 5. Some fallacies concerning syphilis, N. Y., 1889.

Morrow, P. A. 1. Syphilis and marriage (from the French), N. Y., 1881. 2. Drug eruptions, N. Y., 1887. 3. Atlas of skin and venereal diseases, N. Y., 1889. 4. A system of genito-urinary diseases, syphilis, and dermatology, N. Y., 1892 to 1894.

Piffard, H. G. 1. 2. (with Fox) Venereal and cutaneous memoranda, N. Y., 1877; 2d Ed., 1880. 3. 4. Materia medica and therapeutics of the skin, N. Y., 1881. 5. Cutaneous memoranda, N. Y., 1885.

An elementary treatise upon diseases of the skin, N. Y., 1876. *Bibliotheca dermatologica*, N. Y., 1879. 6. The modern treatment of eczema, Detroit, 1886. 7. A practical treatise on diseases of the skin, N. Y., 1891.

Ravogli, A. Hygiene of the skin, Cincin., 1888.

Robinson, A. R. A manual of dermatology, N. Y., 1884.

Rohé, G. H. 1. Practical notes on the treatment of skin diseases, Balt., 1885; 2d Ed., 1886. 2. (with Lord) A practical manual of skin diseases, Phila., 1892.

Stelwagon, H. W. 1. Essentials of diseases of the skin, Phila., 1890; 2d Ed., 1894; 3d Ed., 1899. 2. Mracek's handbook of diseases of the skin, Phila., 1899.

Taylor, R. W. 1. Syphilitic diseases of the osseous system in infants and young children, N. Y., 1875. 2. (with Bumstead) The pathology and treatment of venereal diseases, N. Y., 4th Ed., 1879; 5th Ed., 1883. 3. Clinical atlas of venereal and skin diseases, Phila., 1888. 4. The pathology and treatment of venereal diseases, Phila., 1895. 5. A practical treatise on sexual disorders in the male and female, Phila., 1897, 2d Ed., 1900. 6. A practical treatise on genito-urinary and venereal diseases and syphilis, Phila., 1900.

Van Harlingen, A. A handbook of the diagnosis and treatment of skin diseases, Phila., 1884; 2d Ed., 1889; 3d Ed., 1895.

White, J. C. *Dermatitis venenata*, Boston, 1887.

An account of the literary activity of the members of this Association would be incomplete that did not mention the Journal devoted to our specialty that under various names has been maintained through the whole life of our Association by some of its members. The work has been a labor of love, for the journal has been run at considerable loss at times. It has always been a periodical of the first class, and a credit to its editors.

Dr. L. D. Bulkley issued the first number of *The Archives of Dermatology* in October, 1874, and continued its publication until October, 1882. Drs. H. G. Piffard and P. A. Morrow issued the first number of *The Journal of Cutaneous and Venereal Diseases* in October, 1882, and continued in the joint editorship until 1886, when Dr. Piffard retired.

Dr. P. A. Morrow continued the Journal as its sole editor. In 1887 the title was changed to that of *The Journal of Cutaneous and Genito-Urinary Diseases*. In 1889 Dr. J. A. Fordyce was associated in the editorship, and in 1892 he assumed entire charge, Dr. Morrow retiring. In 1896 Dr. J. C. Johnston was associated with Dr. Fordyce in the management of the journal. In 1897 Dr. Fordyce retired and since

then the journal has been conducted by Drs. Johnston and Swinburne with the coöperation of six of our members.

Since the foundation of our Association we have published statistical tables showing the frequency of skin diseases in this country. The first chairman of the committee on statistics was Dr. J. C. White. For the past seventeen years Dr. J. N. Hyde has been the chairman. It is to be regretted that these statistics are not as complete as they should be. This incompleteness is not due to any lack of effort on the part of the committees, but to an apparent lack of interest on the part of the members. Even taking into account the incompleteness of the returns the tables are the most complete of anything of the kind in the world, and are of value as shown by the frequency with which they are quoted. The first report of the committee was made in 1877, and the number of cases reported was 17,000. There were reported in 1891 22,455 cases, and the combined returns for the twenty-five years cover 386,426 cases.

Thus ends the history of our past. The future of the Association is assured. We have always preserved a high standard of requirements for the admission of new members, and this should be kept high. No one should be admitted into our fellowship unless he has made himself known to most of us by the excellence of his work. A purely local reputation should not be considered sufficient for admission into our body.

The record of the past is one of which we may well be proud. With the passing years we have grown stronger and stronger and we come down to the present with a membership of forty-eight from all parts of this country and from Canada. We are a harmonious body working for the honor of our Association, and the work we do is of the highest grade.

TWO CASES OF MALIGNANT VASCULAR TUMOR (PERITHELIOOMA) OF THE SKIN.

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AND

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MALIGNANT vascular tumors of the skin have been described by but few authors, and have been called with but few exceptions, so far as we can find, endotheliomata or angiosarcomata, no distinction being drawn between the endo-vascular or peri-vascular types.

From a somewhat hasty review of the literature we might have come to the conclusion that the perithelial variety was very uncommon had it not appeared from illustrations of growths described as endotheliomata that these were really peri-vascular types of tumors arising about blood vessels. But even so, these tumors arising in the skin are not common, and that they occur in youth so commonly is interesting.

Fordyce (*Am. Journ. Med. Sc.*, 1900, cxx, 159) has described cases of endotheliomata of the skin. In one case the new growth occurred in the arm, at the site of a lupus ulcer. This patient was a woman, 46 years old. The growth had been superficially excised before a diagnosis had been made, and it had recurred. It was finally entirely removed. This histological examination proved it to be a blood vascular tumor. The second case, also of Fordyce, occurred in a woman 40 years old, and the third in a girl of 10 years. The tumors in both of these cases were on the scalp. In a fourth case, the growth appeared at the site of a wart on the abdomen of a boy 12 years old.

Winfield (*JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES*, 1900, xviii, 113) reported an angio-sarcoma of the chest wall of a boy 15 years old. The original tumor had been excised, and at the site of excision recurrences were noticed one month later. Eight months later the small and larger growths occupied an area measuring three

by four inches in diameter. The subsequent history is not published as far as we can find.

Wolters (*Arch. Derm.*, 1900, liii, 269) describes two cases of angiomata, one of which he calls hemangio-endothelioma tuberosum multiplex and one hemangio-sarcoma cutis. This later growth, he says, originated in the vascular adventitia and would therefore fall under the head of the peritheliomata. It is to such a group that our cases described below belong.

Case I.—An Italian boy, 10 years old, who came to the hospital with a small tumor on his great toe, over the phalangeal joint. He dated its growth from a blow received about two weeks before. It was about 1 cm. in diameter and was shaped like the top of a small mushroom. It was bright red in color, and had a smooth surface, only slightly tender, but bleeding readily when rubbed. The edges were free, the growth being set upon a short slender pedicle.

When the pedicle was divided, free bleeding took place from a small artery in it.

After the first dressing, the lad did not return to the clinic.

The tumor, as it was seen in the pathological laboratory, was a rounded, flattened piece of tissue, reddish-brown in color, with an irregular nodulated surface measuring about 1 cm. in diameter. It was fixed in Zenker's fluid, imbedded in paraffin and cut in serial sections. Sections were stained with hematoxylin and eosin, thionin, methylene blue, Mallory's stain, and Van Gieson's stain.

Grossly it was composed of very vascular tissue with thick bands of fibrous tissue arranged in a more or less radial manner, the radiation extending from the center toward the periphery. There was very little epithelium present on the surface of the tumor, a few small islands appearing in one or two places. The remainder of the surface was covered with a proliferated fibrous tissue containing a large number of polymorphonuclear leucocytes. This infiltration extended inward for not more than one millimeter.

The mass of the tumor was composed of well-formed blood vessels, the majority of which contained no blood cells. In all of these the endothelial lining was intact. Outside the endothelium and invading the peri-vascular supporting connective tissue were cells of both epithelioid and fibroblastic characters, forming the picture of either a pure perithelioma, or of a spindle-celled sarcoma, as the case might be. In the center of the tumor the sarcomatous type prevailed, nearer the periphery the peritheliomatous type.

The tumor is undoubtedly a perithelial hemangio-sarcoma. In some instances there is but a single layer of endothelial cells about the ves-

sels, in others the inter-vascular spaces are completely filled with these cells and the gradual spread of the involvement can be seen following along the inter-vascular connective tissue. Where the resistance to growth is greatest, *i.e.*, in the center of the growth, the spindle-celled type prevails; at the periphery the perithelial type is most prominent.

The nuclear figures are abundant, and irregular mitoses are frequent. There is no evidence of pigmentation.

Case II.—The patient was a child of $3\frac{1}{2}$ years, and the tumor in this case appeared on the scalp. There was no history of trauma. The growth was in the form of a small pendulous tag arising over the posterior branch of the temporal artery. It was about $1\frac{1}{2}$ cm. in length and of a pinkish color, and with some hair on its surface. The growth in this case was not as distinctly pedunculated as in the previous case.

It had been first noticed about a month before the child was brought to the clinic, and since its appearance its growth had been gradual. In this case the pedicle was ligatured before removal, and after division the base was cauterized.

The tumor has the same general appearance as the first, and was almost exactly similar in structure. It, too, had been irritated, and at one place was ulcerated. The epithelium in this case, too, extended down into the tumor in well-defined strands, and these were surrounded by a typical vascular sarcomatous tissue arising from the perithelium of the blood vessels, which formed an intricate mesh-work, and which, for the most part, contained blood.

This case, like the first described, is one of perithelial hemangiosarcoma.

FATTY DEGENERATION OF THE BLADDER AS A FACTOR IN THE PATHOLOGY OF GENITO-URINARY DISEASE IN MIDDLE AND ADVANCED LIFE.

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WHILE the present operative treatment in obstructive diseases of the prostate is justly dominating the profession, the consideration of conditions which produce independently urinary retention or enter as a factor into the retention produced by prostatic obstruction would seem to be timely. Fatty degeneration of the prostate and bladder is a condition not generally recognized. That it is an important factor in genito-urinary pathology I am convinced from the observation of several distinct cases. These I will report:

Case I.—J. B., aged 40. General history unknown, excepting the fact that he had been a hard drinker all his life. The condition of the urinary apparatus previous to death unknown, save as indicated post-mortem. Patient died of delirium tremens with acute retention. Conditions found on autopsy and subsequent careful examination of the genito-urinary tract were as follows:

Macroscopic Characteristics.—Meatus urinarius considerably contracted. This was in part congenital, but mainly the result of a cicatrix, evidently from old-time chancroid. The urethral mucous membrane was thickened in plaques, and there were two distinct annular strictures of moderate caliber, the result, evidently, of an old gonorrhea. The prostate was slightly enlarged. The mucous membrane of the prostatic urethra was hyperemic and thickened. The veru montanum was considerably enlarged, but rather pale and firm to the feel, from chronic inflammation and connective tissue hyperplasia. The mouths of the prostatic ducts were found with some difficulty, being considerably contracted; indeed, almost obliterated by chronic inflammation. The bladder was largely distended by apparently normal urine. The mucous membrane corresponding to the prostato-vesical junction was pale and thickened from chronic inflammation and hyperplasia. Above this was a collar-like area of hyperemic mucous membrane, showing chronic

inflammation of a more recent date than that at the prostatic-vesical junction. This hyperemic area was of irregular form, from one-half an inch to one inch in width, and was arborescent throughout. The surface of the mucous membrane was granular, especially laterally. The mucous membrane of the bladder above this annular area looked fairly healthy, aside from distinct telangiectatic areas in which the arborescent appearance of the blood vessels was beautifully marked. The seminal vesicles were healthy. The prostate body proper and the wall of the bladder plainly showed fatty degeneration, having very much the appearance of yellow beef fat. By the naked eye, no muscular structure could be detected.

The kidneys were acutely congested, and showed distinct areas of interstitial nephritis.

Microscopic Characteristics.—The prostate and bladder wall were alone examined. These structures were found to be the seat of extensive fatty degeneration, the muscular fibers being few and far between and such as existed being infiltrated with fat. There was a moderate increase of interstitial connective tissue. The impression made upon me by this specimen was, first, that acute retention in such cases must necessarily be followed by permanent atony, and, second, that severe and prolonged retention in such cases should rationally be expected to result in vesical rupture.

Case II.—D. M., forty-five years of age. Died of acute alcoholism with retention. This patient had a history of bladder trouble. As to what this consisted of, the history did not show, and the physician who had charge of the patient prior to his sudden death was unable to give me any information. A complete autopsy was made in this case.

Microscopic Examination.—Both kidneys were enlarged and glandular, showing chronic interstitial changes. The heart was markedly hypertrophied, and the seat of extensive fatty changes, associated with atheromatous patches and mitral insufficiency. The liver was enlarged and fatty, with an excess of connective tissue. There was pronounced arterio-sclerosis of the renal arteries. The bladder was full of slightly turbid urine, extending midway to the umbilicus. The tissues surrounding it were distinctly edematous. The immediate cause of death was uremia, precipitated by a debauch.

The bladder in this case was one of the most interesting specimens I have ever examined. Both the prostate and bladder showed the same fatty changes as in the preceding case. There was a distinctly marked *bas fond*, which could not be explained by any obstructive condition at the vesical neck. The only explanation, apparently, was the fatty degeneration of the bladder wall and its gradual yielding to the pressure of

the urine. The microscope showed fatty changes which were fully as marked as in Case I.

Case III.—W. B., aged 47. In this case sudden death from chronic myocarditis succeeded an alcoholic debauch. Previous history absolutely unknown. Prostate and bladder only examined by me.

Macroscopic Appearance.—The prostate was of normal size. The urethra tunneled the prostate to the left of the median line, being barely covered in laterally, the bulk of the prostate being situated to the right of the urethra. The bladder was dilated and columnated. There was a large quantity of perivesical fat. Both prostate and bladder showed to the naked eye marked fatty changes. There was a slightly marked *bas fond*, with a distinct intraureteral bar. There was no prostatic obstruction.

The bladder was moderately distended with normal-looking urine. One-half inch posterior to the opening of the right ureter was a sacculus as large as a good-sized hazelnut. About an inch external to the left ureteral opening there was a sacculus as large as a good-sized hen's egg. The vesical opening of this latter sacculus measured three-eighths of an inch in diameter. Both sacculi were empty. The mucous membrane was trabeculated, and showed evidences of recent more or less acute inflammation, with engrafted chronic inflammatory change. The mucosa was markedly arborescent, especially in the vicinity of the openings of the sacculi. The anterior and left lateral aspects of the mucosa were comparatively healthy. The prostatic urethra was normal.

Microscopic Characteristics.—Sections showed extensive fatty degeneration of both bladder and prostate. The sacculation of this bladder, unassociated with a distinct obstruction at the vesical outlet, is worthy of note. There is little question but that this patient had suffered from vesical atony for a prolonged period. The functional capacity of the bladder muscle could be gauged with a fair degree of accuracy from the marked condition of fatty degeneration shown, not only by the microscope, but by the naked eye. The openings or rims of the sacculi were well rounded and thickened, which would seemingly indicate their long-standing, and probably their congenital character. I say that they were probably congenital, because there was no obstruction at the vesical neck, which, even in the presence of the extensive fatty change, could have produced sacculation of the bladder.

Another interesting point is the fact that such marked pressure as was necessary to form these sacculi would probably have produced a complete rupture of so degenerated a vesical wall long before sacculi of any size could have formed.

The most important point in connection with the foregoing cases

is their relation to the occurrence of sudden retention in old or even middle-aged men, in whom no perceptible organic prostatic obstruction can be found. Alcoholism probably constituted an important element in the etiology of these cases, and the acute retention which so often follows an alcoholic debauch may perhaps be explicable in many instances by fatty degeneration of the bladder, whether obstruction at the vesical outlet exists or not. Certainly, such fatty degeneration must be a very important factor in the atony following prolonged retention of urine, which often occurs in patients at or above middle life.

Another very important point is this: This fatty degeneration of the bladder muscle is by no means limited to patients who are free from prostatic obstruction. It may be associated with prostatic disease. It constitutes one of the causes of the failure of radical operations, of whatever kind.

As a condition predisposing to vesical rupture in case of traumatism of a full bladder, such fatty degeneration as I have described is certainly worthy of consideration. Where this fatty degeneration exists a very moderate degree of temporary spasmodic or congestive obstruction at the vesical neck is sufficient to bring about acute retention. In such cases as those described, the balance between the *vis a fronte*, i.e., the equilibrium of the resistance of the cut-off and sphincter muscles, and the *vis a tergo*, i.e., the contractile power of the degenerated bladder wall, is very delicate, and a very slight disturbance is sufficient to overcome the *vis a tergo* altogether, and produce retention. This is especially the case after the floor of the bladder has been lowered, with the resulting formation of a *bas fond*, in cases of obstruction at the vesical neck.

It is wise, in the face of such degenerative conditions as I have described, not to claim too much for any radical operation upon the prostate, in cases of obstructive disease. From the enthusiasm with which some surgeons are booming various operations upon the prostate, one would infer that the morbid anatomy of vesical and prostatic disease had been revolutionized for the express benefit of operators by one or another radical method. The possible benefits to be derived from radical operations upon the prostate and bladder should always be discounted in the face of the various degenerative changes, and particularly fatty degeneration, which may exist either as a primary or secondary condition in chronic genito-urinary disease.

DERMATOLOGICAL CASES (ZOSTER GLOSSITIS).

BY MAX REICHMAN, M.D.,
Chicago.

1. Herpes zoster menstrualis sacro-lumbaris.

G. P., French-Canadian, age 35 years, has been under my observation since February, 1900. Her father died from tuberculosis pulmonum, her mother at birth of the patient. At the age of 18, patient had an attack of typhoid fever; at 28, pneumonia. One year later she acquired syphilis through her husband. She was treated for two years and had no recurrence until 1900, when an eruption appeared on the mucosa of the mouth. I prescribed mercury inunctions and internal administrations of pot. iodid; she recovered and has not shown any symptoms since.

Menstruation, which set in at the age of 12 years, was always scanty. For the last ten years patient claims to have noticed regularly an eruption of vesicles in the left sacro-lumbar region at the time of each menstruation, which eruption was preceded for a period of two to three days by considerable burning and was accompanied by moderate itching. After eight to ten days all symptoms disappeared without any treatment.

This history I obtained from the patient in September, 1900, when she called my attention to a group of dried-up vesicles in the left sacro-lumbar region. The following month I was able to observe the eruption at the height of its development.

There was a group of limpid vesicles the size of a silver dollar upon the left sacro-lumbar region. The surrounding skin, however, showing no pathological changes. In November, the eruption appeared for the first time symmetrically, *i.e.*, on both sides, although the right one was less affected than the left.

Patient showed at that time extraordinary irritability, the touching alone of the diseased parts causing trembling of the body and chattering of the teeth, I prescribed for her acid-arsenicousum in pills (a) 0.001 three times daily in increasing doses. The eruption recurred on the following December and January, and then on one side only; since then there was no relapse.

I consider this case an extraordinary one, although cases of cutane-

ous eruptions of different types at the times of menstruation are not so rare.

Thus Bergh¹ in an extensive article, which includes numerous references from literature, reports a case of vesicular eruption on the female genitalia at the time of menstruation and compares it with the herpes progenitalis of the male.

Levin² also reports on the appearance of small vesicles on different parts of the body during menses, but such constant and regular appearance of a typical herpes zoster in the same region of the body as in my case, I have not found recorded.

2. *Glossitis superficialis chronica* (Moeller).

E. G., American, 18 years old, single, was first seen in May, 1900. Family history good, no similar affection in any member of the family. Patient is poorly developed, having the appearance of a girl of 14; suffers acutely from an affection of the tongue while partaking of hot or seasoned food for the last three years. For about six years she complained of obstinate constipation and very poor appetite. Menstruation set in at the age of 16, always regular, and the flow was extremely weak, accompanied by severe pains in the back. The patient is of gracile build, weighs 87 pounds, complexion very pale, visible mucous membranes very anemic. The sounds of the heart clear but weak; internal organs normal. In the submaxillary region of the right side is felt a hard indolent tumor which is said to have persisted since childhood.

The upper surface of the tongue shows a brown coating; the tip, margins and lower surface are covered with bright red papules of lentil size, the center of which is white without exception. Similar papules are noted on the mucous membrane of the cheeks and lips, and especially at the angles of the mouth.

I made the diagnosis of a mycotic infection, being unable, either from the history or from careful objective examination, to obtain any evidence of syphilis; but neither a microscopical examination for fungi nor antimycotic treatment, which was continued for a considerable length of time without improvement, seemed to confirm the correctness of my diagnosis. A histo-pathological examination of an excised fresh papule, for which I am indebted to Dr. Gustave Futterer, showed an enormous small cell infiltration with loss of epithelium. I had, in other

¹ R. Bergh.—Ueber Herpes menstrualis, *Monatsch. f. prakt. Dermat.*, Bd. 10. No. 1.

² E. Levin.—Ueber Herpes bei Frauen und seine Beziehungen zur Menstruation, *Deutsche Med. Wochenschr.*, 1900. Nos. 17 and 18.

words, a case of glossitis superficialis chronica, which was first described by Moeller and afterward by Michelson,¹ Joseph² and Preuss.³

According to the advice of Joseph, the affection was now treated with strong lactic acid applications without any effect; however, better results seemed to be obtained by a huckleberry decoction recommended by Preuss as an astringent mouth wash, although I do not hesitate to attribute the decided improvement manifested in the last few months to the systematic treatment of the patient's anemia, consisting in the prolonged use of arsenic and iron preparation as well as proper hygienic and dietetic measures.

Notes.

CORRECTION.—The editor of the *Russian Journal* desires us to make this correction. The work credited on p. 244 to "Prof. Zehner's Clinic" belongs properly to Prof. Selenew's Clinic. It is a praiseworthy custom to recognize in this way the institution whose facilities are used, and we are pleased to further it in any way.

THE SECOND INTERNATIONAL CONFERENCE OF PROPHYLAXIS OF SYPHILIS AND VENEREAL DISEASE has taken place in Brussels from the 1st to the 6th of September, 1902. The following program is arranged for the conference:

I. Public Prophylaxis.

Whereas, on the one hand, it is the duty of the public authorities to safeguard society against contagious diseases, which, by their frequency and by the faculty with which they are spread, constitute a public danger; and while on the other hand, quite apart from the sanitary point of view, it is their mission to protect minors abandoned by their parents;

A.—What measures of public prophylaxis, under the form of legal provisions, should be taken against venereal diseases, specially with reference to the following points:

RELATIVELY TO PROSTITUTION:

1. The prostitution of minors;
2. The action of public bodies whether in the interest of public morality and tranquillity, or from a sanitary point of view;
3. Procurers and bullies.

¹ Michelson.—Ueber einige seltenere Zungenkrankheiten, *Berliner Kl. Wochenschrift*, 1890, No. 46.

² M. Joseph.—Beitrag zur Glossopathologie, *Deutsche Med. Wochenschr.*, 1891, No. 18.

³ Preuss.—Zur Pathologie der Zunge, *Centralbl. f. Chirurgie*, 1893, No. 9.

NOT ASSOCIATED WITH PROSTITUTION :

1. The protection of minors of both sexes;
2. The organization of measures of relief for those suffering from venereal diseases; the duties of charitable institutions to those so suffering;
3. Suckling by wet nurses;—contagion by midwives and nurses;—arm to arm vaccination;—contagion in factories and workshops by means of instruments of labor;—registry offices, etc.
4. Is it necessary to apply the principles of civil and penal responsibility for the transmission of venereal diseases?

II. Individual Prophylaxis.

Taking into consideration that if the public authorities have to take prophylactic measures against venereal diseases, the duty of self-preservation is incumbent on every one; on the healthy, by the avoidance of all dangerous contact with an infected subject, and on the diseased by avoiding the possibility of infecting others;

1. What are the best means of enlightening the youth and the general public on the social and individual dangers of syphilis and gonorrhea, as well as the methods of contagion of these two diseases, direct or indirect?
2. How can one best facilitate individual prophylaxis by means of charitable institutions (dispensaries, refuges, etc.) and the medical treatment of patients of both sexes suffering from syphilis or gonorrhea?

III. Statistics.

What should be the uniform basis on which the statistics of venereal diseases in all countries should be formulated?

IV. Personal Communications.

In conformity with the decision of the first Conference, personal communications may be introduced, with the consent of the Committee on subjects not dealt with in the Programme, and a special sitting will be devoted to their consideration.

An account of the Proceedings of the Conference will be given in the next issue.

Selections.

CUTANEOUS DISEASES.

The Clinical Aspect and Histology of Bazin's Erythema Induratum (Neisser's Clinic). WILHELM HARTTUNG and ARTHUR ALEXANDER (*Arch. f. Derm. and Syph.*, Vol. 60, 1902, p. 40).

The case of a man of thirty who came under hospital observation of the writers, presents the material for this study. The first examination of the patient's disease suggested the possibility of malignant endothelioma, but further study enabled the writers to arrive at the foregoing diagnosis, which they substantiated by thorough clinical microscopical and bacteriological examination. During the patient's sojourn in the hospital he received three injections of tuberculin, which was followed by an eruption of lichen-scrophulosorum-like lesions, but no local reaction took place on the sites of the patches and nodules of the disease. Neither did an improvement follow a vigorous antisyphilitic treatment. The local condition of the erythema did not get worse after the use of iodid of potash. No tubercle bacilli could be found in the sputa in the first sojourn of the patient in the hospital, but six months later when the patient was in a hospital suffering with pleuropneumonia, tubercle bacilli were found. The patient succumbed and the autopsy showed tuberculosis of the lungs, of the spinal cord and a tuberculous sinus of fourth vertebra. Animal inoculation performed immediately after the death of the patient gave negative results. The histological examination of excised tumor proved to the satisfaction of the writers the presence of many real tubercles (Neisser in the discussion expressed the opinion that the histological pictures of the sections of the tumors do not impress him as being tubercular. Ref.), which in their opinion entitled them to consider the tumors and other local lesions of tuberculous origin, in spite of the negative results obtained from animal inoculation, from the injection of tuberculin and in spite of the failure to demonstrate the presence of tubercle bacilli in the tissues of the lesions.

Plato's Experiments in the Preparation and Use of "Trichophytin."—

Reported after his death by A. Neisser (*Arch. f. Derm. and Syph.*, Vol. 60, 1902, p. 53.)

The late Dr. Plato, during his assistantship in Neisser's clinic, undertook to prepare a special preparation of trichophytin and investigate its action upon patients suffering with trichophytosis, following the line of investigation on tuberculin. Prof. Neisser gives the method of preparing the trichophytin and a résumé of the clinical results, obtained in his clinic by the late Plato from its injection. Trichophytin obtained from the culture of a parasite of a deep trichophytosis and injected into a patient suffering with deep trichophytosis will produce "a general reaction": the temperature will rise and symptoms of general intoxication will be noticed. At the same time a local reaction seems to take place manifesting itself objectively by a hyperemia and formation of pustules and subjectively by increased burning sensation of the affected portions. The cases where general and local reaction takes place a therapeutic effect is

undeniable. The trichophytin has only a specific reaction in cases which are due to the same parasite from which the trichophytin was obtained. Healthy persons as well as in persons suffering with other affections exhibit no reaction from trichophytin injections. It is to be noticed that there exists a difference between deep and superficial trichophytosis. Trichophytin obtained from deeply seated trichophytosis does not act in persons with a superficial disease. Trichophytin does not produce a reaction similar to that of tuberculin in tuberculous patients, neither does trichophytin act upon patients suffering with favus. "Favin" obtained in the same manner as trichophytin does not produce any reaction in patients suffering with favus.

1. A Peculiar Inflammatory Disease of the Skin of the Nose in Young Individuals, Associated with Hyperhidrosis.—HUGO HERMANN (Neisser's Clinic) (*Arch. f. Derm. u. Syph.*, Vol. 60, 1902, p. 77).

2. About Granulosis Rubra Nasi (Jadassohn). W. PICK (Prof. Pick's Clinic) (*Arch. f. Derm. u. Syph.*, Vol. 62, 1902, p. 105).

Nine more cases of this peculiar affliction are added to those first published by Jadassohn under the name "Granulosis rubra nasi." (See JOURNAL, 1902, p. 134.) The clinical aspect of the disease as described by the writer corresponds in every particular with the description of Jadassohn, the difference being in the sex of the patients; boys predominating in Hermann's cases.

Jadassohn describes the presence of enlarged ducts and coils of the sweat glands; the present writer did not notice any enlargement in his microscopical sections.

Pick (2) reports another case with histological examinations of an excised portion of the affected skin. He directs the attention to the marked and constant hyperidrosis of the affected portion, a symptom upon which the former writers did not lay enough stress, and he suggests the addition of "e hyperidrosi" or "cum hyperidrosi" to Jadassohn's original name, Granulosis rubra nasi. The hyperidrosis is absent upon the papules. His histological findings are in accord with those of Jadassohn. He does not suggest any therapy, as all remedies tried failed to improve permanently the condition.

Microscopical Investigations Regarding the Significance of the Zone of Reaction After Injections of Tuberculin.—By VIKTOR KLINGONUHER (Neisser's Clinic) (*Arch. of Derm. and Syph.*, Vol. 60, 1902, p. 100).

The clinical fact that, after tuberculin injections, zones of reaction appeared either in the place of localization of the tubercular process or far from its seat, was accepted as an expression of a non-specific inflammation in a specifically affected zone. The microscopical examinations of the writer show this to be an erroneous opinion and furthermore give a histological explanation of the clinical reaction. In all the places of reaction, both near the affected portion of skin and far from it he found microscopically a typical tubercular process, while clinically and microscopically no changes could be seen before the injection of tuberculin. This fact can be advantageously utilized in treatment of lupus, by determining, before medical interference with the lesions, the extent of the affected area.

1. Inflammation Produced by the Vines of *Primula Obconica*.—W. WECHSELMANN. (*Monat. f. pr. Derm.*, Vol. 35, 1902, p. 1.)

2. Primula Obconica as a Cause of Disease.—DREYER (*Munch. Med. Wochenschrift*, 1902, p. 574.)

This plant introduced in 1883 from China is the cause of inflammatory affection of the skin and mucous membranes. The skin affection is characterized by severe itching combined with a painful sensation of burning lasting for a longer or shorter period. The affected skin is red, swollen, covered either with wheals, or papulas, but oftener with large serous and sometimes with bloody blebs. Usually the hands, fingers, the interdorsal folds, dorsal aspects of hands, forearms, face, especially the eyelids, cheeks, chin and ears are affected—locations with which the secretion of the plant came in direct contact or to which it is transferred by the hands. As the plant is usually not suspected to be the cause of the affection of the skin, the patients do not avoid the contact and the disease takes a chronic course. The action of the virus is not simultaneous with the contact of the plant. Sometimes weeks may pass before the effect will be seen, as the patient hardly remembers had he come in contact with it. The virus does not act upon an uninjured epidermis, only when it passes into the deeper layers of the skin, when slight resorption takes place. The virus is not soluble in water, but it does dissolve in the secretions of the skin, especially in fats. Owing to this fact the therapy consists in the use of alcohol, applied locally to the affected parts. Zinc pastes and powders are also of use.

The recurrence of the disease in cases where contact with the plant cannot be proven, may be due to the fact that the virus has been left in the garments of the patient during his first attack.

1. A Note on the Occurrence of Bullae in Lichen Planus.—ARTHUR WHITFIELD (*The Brit. Jour. of Derm.*, Vol. XIV., 1902, p. 161.)

2. A Contribution to the Knowledge of the First Stage of Lichen Ruber Planus.—FELIX PINKUS (*Arch. f. Derm. and Syph.*, 60, 1902, p. 163).

3. A Case of Lichen Ruber Moniliformis Following the Subcutaneous Veins.—A. GUNSETT (Prof. Wolff's Clinic in Strassburg) (*Arch. f. Derm. and Syph.*, 60, 1902, p. 179.)

4. Lichen Planus of the Palm and Sole.—W. DUBREUILH and E. LE STRAT (*Ann. de Derm. et de Syph.*, III., 1902, p. 209.)

The occurrence of bullae in lichen planus is rare. Whitfield gives the history of a patient with this rare complication. A typical lichen eruption covered the body, but both legs, especially the right one and right foot, were occupied with bullae, which corresponded exactly with the papules. Histological examination showed that the bullae were caused by a separation of the entire epidermis from the papillae. The epithelium forming the sides and roof of the bulla was distorted. Below the bullae the papillae were flattened out and there was an infiltration of the superficial part of the corium with various kinds of cells. In analysing the literature which has grown up about this complication, the writer comes to the conclusion that arsenic taken internally cannot be regarded as a cause of the bullae, as cases of lichen are reported with bullae where arsenic was not administered; that there is no definite relation of the blebs to the lesions, that there is no consistent alteration of the blood, nor are the cellular contents of the bullae of a definite kind; and that the seat of the bulla may be deep or only the horny layer alone involved. Pinkus (2) in

studying the histological development of the primary lesion of lichen planus concludes that the most characteristic points in the beginning of the formation of the papule are the conglomeration of lymphocytes deeper in the upper layers of the cutis and the migration of the polynuclear cells through the epithelial layers. The lymphoid celled infiltration plays an important rôle in the formation of bullæ in lichen planus, raising the epithelial layer from the cutis, destroying the rete. But in some cases the bulla is formed in the upper layers of the epithelium leaving intact the cylindrical layer.

Gunsett (3) took advantage of a case of lichen moniliformis which he had the opportunity of studying to determine the histological character of the lesions and give an explanation of their peculiar disposition. Histologically, the lesions showed a hyperplasia of the cells of the malpighian layer, hyperkeratosis with the formation of horny pearls and horny tags, a regressive metamorphosis of the cells of the malpighian layer with the formation of colloidal shells. In the cutis, a small cell infiltration of the papillary and subpapillary layers reaches into the lowest strata of malpighian layer, separated below by a sharp line, the infiltration extending alongside the veins, the papillæ being broken and broad, accompanied with a venous hyperemia. The distribution of the lichen was in the direction of the veins, although no pathological changes have been found either around or in the walls of the veins, except an enlargement of their lumen. The writer is inclined to ascribe to this enlargement an important rôle in the distribution of the lichen papules, basing his belief upon the experiment of Recklinghausen who injected zinc chlorid into the vein of a cadaver and obtained the same configuration upon the skin as presented by the lichen moniliformis.

Dubreuilh and Le Strat (4) give clinical history of three cases of lichen of the palms and soles. They picture the clinical symptoms of the disease upon the foregoing locations and enumerate the diagnostic points for differentiation from arsenical, eczematous, psoriatic and syphilitic keratoses.

1. **Sarcoma Cutis Idiopathicum Pigmentosum Kaposi.**—V. M. KUDISH (*Russian Journ. Skin and Ven. Dis.*, Vol. III., 1902, p. 171.)
2. **Contributions to the Pathology of Kaposi's "Granulomata."**—J. SELLEI (*Monat. f. Prak. Derm.*, Vol. 34, 1902, p. 497.)
3. **A Case of Primary Sarcomatosis of the Skin.**—G. PINI (Prof. Majocchi's Clinic) (*Arch. f. Derm. & Syph.*, 61, 1902, p. 103).

Sellei (2) considers the importance of hemorrhages in the course of the development of the granulomata. To their occurrence is probably due the clinical fact that some of the growths are absorbed. The opinion of Kaposi that the involvement of the lymphatic glands in this type of granuloma is not characteristic of the disease, is questioned by the writer. In his investigations he found that the lymphatic glands take part in the process exhibiting histologically a productive connective tissue inflammation and the presence of pigment; as to the question whether the pigment was formed in the lymphatic gland itself or was only deposited there from other parts of the body, the writer is inclined to regard it as a deposit coming from the hemorrhages which take place in the skin tumors. He did not find any characteristic spindle-like cells in the glands.

Pini (3) gives a history of a patient who succumbed to a growth which in all probability started from a pre-existent nævus of the skin. The autopsy revealed

amyloid degeneration of the heart, kidneys, spleen, fatty degeneration of the liver, sarcomatosis of the lungs and skin. Animal inoculation as well as culture gave negative results. The histological examination of the skin tumor as well as of the tissues involved in the metastatic process showed a spindle cell sarcoma.

Kudish (1) reports a case of sarcoma cutis pigmentosum.

GENITO-URINARY DISEASES.

Some Points Relating to Renal Calculus, by SIR WILLIAM BENNETT, K.C.V.O., F.R.C.S. (*Philadelphia Medical Journal*, Feb. 22, 1902, page 365).

Three cases are described, which are intended to illustrate the uncertainty of symptoms in cases of stone in the kidney. In the first case the signs of stone were quite clear, yet there was a counter-condition in the shape of a urethral stricture, which might have been sufficient to account for the symptoms also. The presence of stone in the kidney was a mere coincidence, and had nothing to do with the stricture. The kidney was incised, and the stone extracted whole. There was considerable foul pus about the stone. Since the removal of the calculus, the amount of pus in the urine has decreased considerably, and the patient is much improved.

Case II was that of a man who complained of pain in the left loin accompanied with vomiting on two occasions. The usual symptoms of renal calculus were absent. Deep pressure elicited no tenderness, though the patient felt "as if there were something there." The kidney was incised, and a kidney-shaped stone was found in it. Recovery followed.

Case III was that of a young unmarried woman, with typical symptoms of renal calculus, of a severe character, except that no blood had ever been passed. Examination showed no stone in the bladder. One day after riding in an omnibus, she had an attack of hematuria, with great exaggeration of the pain. The kidney was cut down upon, but after a most searching examination, no signs of stone or pathological lesion could be found. The organ was sound to all appearances. Sir William is unable to state the cause of the patient's symptoms, though he is quite certain that the operation will cure her. It is quite likely that there may be a stone in the opposite kidney presenting "crossed symptoms."

A. L. W.

The Roentgen Method in the Diagnosis of Renal and Ureteral Calculi, by CHARLES LESTER LEONARD, A.M., M.D. (*Medical News*, Feb. 15, 1902, page 305).

The Roentgen method is essentially a method of diagnosis, and as such should be used by professional men only, possessed of professional knowledge, special technic and clinical experience. In kidney affections, its value is unquestioned. In one case in which the diagnosis lay between ureteral calculus, chronic ovarian disease and appendicitis, the Roentgen examination excluded calculus, and operation revealed an inflamed ovary bound down by adhesions. In another case of difficult diagnosis, the skiagraph showed six phleboliths which the operation proved were in a varicocele of the broad ligament. In a case diagnosed as "nervous dyspepsia," the colic and gastric crises were found to have been caused by a calculus impacted in the ureter.

The skiagraph has shown that small calculi in the ureter give rise to "renal colic" more frequently than do calculi in the calyces or renal pelvis.

More than 60 per cent. of the calculi found by the author have been detected in some part of the ureter. In complete obstructive anuria, the recognition of the calculus as the obstruction, prevents operation upon the wrong kidney. In unilateral anuria, unless a calculus is passed and recognized, the subsidence of symptoms is to be taken as an indication of grave danger to the functional life and integrity of the kidney. Immediate operation is indicated if the calculus is found by the skiagraph, and if cystoscope shows the absence of urinary flow from the affected side.

In a case in which an operation was performed, and a fruitless search made for an encysted vesical calculus, the Roentgen examination showed four small calculi impacted in the lower portion of the ureter.

This method is the only means of differentiating between those cases that demand immediate operation, and those in which medical or expectant treatment is justifiable. In nine cases delay has been advised as a result of the examination, and the calculus has subsequently been passed. It is no longer necessary to perform an exploratory nephrotomy upon the healthy kidney before doing a nephrectomy, or to open a healthy kidney in the search for an obstructing calculus in the ureter lower down.

The accuracy of the negative diagnosis renders safe and rational the treatment of renal disease by purely medical measures, when the symptomatology does not point to some cause other than calculus.

In 206 cases of suspected renal calculus, referred to the author, calculi have been found in over 65 cases, and in over 60 per cent. they were in the ureter. In only three cases in which a negative diagnosis was rendered, was it found incorrect; in one case the error being due to faulty technic, in the other two the calculi weighed less than one grain each, and were overlooked and subsequently passed. The calculi that may be overlooked are so small that their final passage is quite certain.

A. L. W.

Gonorrheal Infection of the Prostate, by JOHN VAN DER POEL, M.D. (*Medical Record*, Feb. 22, 1902, page 281).

Van Der Poel discusses the frequency with which the posterior urethra is attacked in acute urethritis. Admitting that this extension occurs in at least one-third of all cases, he is not prepared to agree with Finger and others that every case of gonorrheal infection of the posterior urethra extends to the prostate. He suggests that there is a likelihood of there having been a pre-existing state of simple glandular and follicular catarrh, in those cases taken to be gonorrheal extensions to the organ. He considers that a pre-existing congestion of the prostate favors extension of the gonorrheal process, even where it exists in a mild form.

The most common forms of prostatic inflammation are (1) the glandular catarrhal, (2) the follicular, a variety of the catarrhal, (3) the parenchymatous, simple or developing into an abscess. They are not sharply defined one from another, but are more or less intimately associated, one following the other. Gonorrheal infection of the prostate may develop gradually, and may be present in spite of the absence of subjective symptoms, and in spite of the clearness of the second portion of the urine. In most cases, the signs and symptoms are more or less marked.

On examination, the presence of many leucocytes in the massaged fluid is evidence of a prostatitis and seminal vesiculitis, even where the microscopical

examination is negative; other bacteria such as staphylococci or colon bacilli, are evidence of either a previous catarrhal inflammation, or of a so-called "secondary" infection in a subacute or chronic case, which condition may persist for years, and may be the cause of sterility.

Prophylaxis of prostatitis is synonymous with early and effective treatment of the anterior urethritis. If the extension backward can be prevented only in a certain number of cases, the frequency of prostatitis can be reduced. The author's treatment of acute urethritis giving the best results, consists of irrigations into the bladder of a $\frac{1}{4}$ to $\frac{1}{2}$ per cent. solution of protargol, after anesthetizing the mucous membrane of the anterior urethra with 10 to 15 grams of a $\frac{1}{2}$ or $\frac{3}{4}$ per cent. solution of cocaine in the acute cases. About 200 to 400 grams of the protargol solution are injected directly into the bladder by means of the large sterilizable urethral syringe, with a soft rubber or porcelain tip attached. This is repeated every 24 hours, with no intermediate hand injections by the patient himself. Should the prostate become attacked, massage must be added to the irrigations.

A. L. W.

Multiple Arthritis in a Child Two Years Old Suffering from Gonorrheal Arthritis, by GEO. N. ACKER, M.D. (*Archives of Pediatrics*, February, 1902, page 97).

Acker reports the case of a child two years old, who presented a profuse discharge containing numerous gonococci, accompanied with severe pain on micturition. Seven days after this condition was first noticed, the right ankle became red, hot and swollen, with absolute limitation of motion. Inflammation of the right knee, left knee and ankle followed in rapid order as mentioned.

Under warm vaginal douches of boric solution, and local applications of 25 per cent. ichthyol ointment to the affected joints, the discharge and pain disappeared, and motion became normal again, five weeks after treatment was instituted.

A. L. W.

A New and Improved Method of Closing Vesico-Vaginal Fistulæ, with Report of a Case, by A. LAPHORN SMITH, M.D., M.R.C.S. (*Philadelphia Medical Journal*, February 15, 1902, page 327).

Smith reports a case in which he found a tear of the bladder, vagina and cervix uteri, extending from immediately back of the bladder sphincter on the patient's right, transversely downward and backward through the os on the patient's left, and measuring nearly two inches in length. The flow of urine over the raw surfaces had incrustated it with phosphates and somewhat thickened it. It looked as though the left blade of the forceps employed in the delivery had caught the bladder and cervix under the arch of the pubis and cut it there.

By adopting a new method of operation, which the writer has employed several times with success, there was little difficulty in closing the fistula, and the result was most satisfactory, not a drop of urine coming through after the operation.

After disinfection of the vagina, the latter was incised across, in front of the cervix, and the bladder pushed off the uterus in the same way as in the first step in vaginal hysterectomy. The laceration in the uterus which extended up to the internal os, was denuded and closed by Emmet's method, with chromicized catgut. The vagina was then separated from the bladder by the

finger, everywhere except where the two torn edges had become united at the fistula. With the finger between the vagina and the bladder, it was quite easy with a few cuts to separate them from one end of the fistula to the other. The edges of the long tear in the muscular wall of the bladder were brought together with an over and over fine catgut suture going back an eighth of an inch on each side, and taking care that mucous membrane of the bladder was not caught in the sutures. The slit in the vagina was closed with interrupted silkworm gut passed through the vagina, then through the muscular wall of the bladder, but half an inch through the right of the tear in the bladder, and then through the other side of the vagina, thus displacing the bladder half an inch to the patient's left, so that the line of suturing was no longer in the same place as the line of the tear was. This backed up the line of suture of the bladder with half an inch of solid vagina, instead of a line of sutures, and should any pressure be accidentally brought to bear upon the sutures in the bladder, it would have to overcome a valve instead of a hole, and the harder it pressed the tighter would the valve close. A *catheter à demeure* was left in the bladder for five days, after which the patient passed her water three or four times daily, and has had no trouble since.

The author points out that by his method may be avoided stitches in the mucous membrane, where they are liable to become the nuclei of troublesome calculi. Instead of depending on the union of a narrow edge about a thirty-second of an inch thick, a thick ridge is obtained fully an eighth of an inch thick in the bladder alone, to say nothing of the vagina in front of it.

A. L. W.

On the Diagnosis of Bilateral Cystic Kidney, by WILLIAM OSLER, M.D.
(*American Medicine*, March 22, 1902, page 463).

Osler believes that the condition of bilateral cystic is seldom diagnosed during life. He reports two cases, in one of which the diagnosis was made easily from the characteristic combination of symptoms. These are (1) the presence of bilateral tumors in the flanks; (2) the cardiovascular changes of interstitial nephritis; (3) the condition of the urine, which is that of interstitial nephritis; (4) hematuria.

Polycystic kidney is rarely unilateral. Of 150 cases selected by Ritchie and Lejars, in all but three, both kidneys were involved. There is no difficulty in recognizing that the tumors are renal. In one of his cases, the tumors could be grasped bimanually and their situation and mobility left no doubt that they were enlarged kidneys. Other forms of bilateral renal tumor are extremely rare.

In one of the cases, the sclerosis of the arteries, the dislocation of the apex beat and the accentuation of the aortic second sound were very pronounced. The condition of the urine was characteristic—low specific gravity, slight trace of albumin, a few red blood corpuscles and scanty tube casts. This case also presented cholesterin crystals in the urine. The hematuria may be accompanied, as in this case, by pain.

Failure to make the diagnosis during life is due to the fact that the patients are seen with signs of cardiac insufficiency and dyspnea, and no attention is directed to the kidneys; or they are attacked with sudden coma or uremia.

As a rule, operation is contraindicated, and even in unilateral cases it is

stated that the remaining kidney may become cystic after operation. Henry Morris is quoted as having operated on three cases of cystic kidney, and in two of them the patients were alive and well several years after, adding that operation is indicated and justifiable if the opposite kidney has been found, either by inspection or palpation, unaffected. A. L. W.

Movable Kidney: With Possible Explanation of Failure in Some Cases to Relieve Symptoms by Nephrorrhaphy, by GEORGE H. MALLET, M.D. (*American Medicine*, March 22, 1902, page 513).

The kidneys, though classed as fixed organs, really move up and down with respiration. They move through the arc of a circle in which the kidney vessels form the radius. The average range of motion varies from one-half inch to three inches, according to various authors. A palpable kidney is not necessarily a movable one. "Movable kidney" is the term used by the author to indicate a kidney that has a range of motion in excess of the normal, irrespective of the amount of mobility. The difference between movable kidney and floating kidney is but one of degree. Of all women who apply for treatment of various complaints, four or five per cent. have "movable kidneys." The causes of this displacement are divisible into two classes—those that weaken the kidney attachments, and those that lessen the intraabdominal pressure. The upper part of the ureter usually moves with the kidney and there is a great tendency for the ureter to become kinked at the junction of the movable with the fixed portion. This produces an intermittent hydronephrosis. The blood vessels may also be sharply flexed and interfere with the kidney blood supply.

The severity of the symptoms are in no way proportionate to the degree of mobility. Operation is indicated, however, when distinct symptoms are present which are unrelieved by mechanic or symptomatic treatment, and when secondary changes in the kidneys are present, due to mobility. In cases associated with general enteroptosis, an operation upon the kidney should be followed by a mechanic support of the abdominal wall.

The writer believes that when an operation is indicated and the symptoms persist after the operation, in most cases the kidney has been fixed in a malposition and the organ has rotated outward on its vertical axis in consequence. This condition has been observed after the usual operation, in which the external convex border was fastened to the bottom of the excision looking posteriorly, thus naturally rotating the internal concave border and the hilum more outward than normally, and facilitating the formation of a kink in the ureter and obstruction to the circulation, besides offering a better opportunity for downward pressure by the liver. The writer emphasizes the point that when performing nephrorrhaphy fixation of the kidney alone is not all that is required; care must be exercised that the circulation of the vessels and ureter is not interfered with. The possibilities of these occurrences are not so remote as have been supposed. A. L. W.

On the Association of Stone and Tumor of the Urinary Bladder, with Report of a Case, by EDWARD C. ROSENOW, M.D. (*American Journal of the Medical Sciences*, April, 1902, page 634).

Rosenow reports a case of carcinoma of the bladder complicated with a large round stone, weighing 150 grams, in a man 35 years old. The patient had complained of bladder symptoms since early childhood.

The writer presents several considerations which lead to the belief that in this case the stone preceded the tumor formation: (1) the much more frequent occurrence of uncomplicated cases of stone than of tumor; (2) the extreme rarity of uncomplicated carcinoma of the urinary bladder at this age (35); (3) the long continued urinary disturbances (30 years), and the mildness of the symptoms. It is unreasonable to believe that a carcinomatous growth should have existed for so long a period and have given rise to such slight disturbance. Carcinoma of the bladder is said to prove fatal within three years; (4) the large size and character of the stone.

Of 43 cases tabulated from the literature 37 occurred in males and 6 in females. The average age is 48 years, and they range from 6 to 79 years. In discussing the relation between calculus and neoplasm, the following arguments are presented which favor the view that tumor increases the liability to the formation of a calculus: (1) In 8 cases of the series there is no question but that the calculus was probably secondary to the tumor; (2) tumors, especially of the malignant type, are not infrequently found incrustated with phosphatic material; (3) villous growths are especially liable to cause calculi, because a poorly nourished projecting villus while yet attached or when torn off, may afford a nucleus, much the same as a foreign body around which the urinary salts are deposited.

As evidence that vesical calculus is a factor in the etiology of tumors of the bladder, the author mentions: (1) In over half of the cases it appears that the stone was primary in point of time. (2) Inflammation of the urinary bladder caused by irritation other than that produced by a calculus, has been found to cause an increased liability to new growths. If inflammation caused by chemical, bacterial, and parasitic causes enhances the likelihood of tumor growth in the bladder, the mechanic irritation from a calculus may have the same effect. (3) Tumor of the urinary bladder uncomplicated by stone occurs more frequently in the lower segment. In uncomplicated cases the posterior wall is affected more often than the anterior, the favorite site being at or near the orifices of the ureters, while in cases with calculus the anterior wall is the seat of the tumor in nearly twice as many instances as the posterior. (4) The large number of cases in which the calculus was primary in point of time and the fact that both calculus and tumor occur more frequently in the male sex and nearly at the same age, may be taken to indicate that the calculus was not without etiological influence in the development of the tumor. (5) Since in 90 to 95 per cent. of primary carcinoma of the gall bladder, biliary calculi are present, analogy would lead to expect that a similar relation would exist between stone and tumor in the urinary bladder.

The author therefore concludes that an etiological relationship probably exists between calculus and tumor, and that calculus seems to favor the development of tumor in a larger percentage of cases than tumor favors the development of stone.

A. L. W.

Experimental Urogenital Tuberculosis.—(*Archiv für klin. Chirurgie*, 1901, Band lxiii.)

As the result of his experiments, Baumgarten states that he was unable to produce tuberculosis of the testicle by injecting tuberculous material through the urethra. By this means it was possible to produce tuberculosis of the deep

urethra, prostate and bladder, but never of the vas deferens, testicles, ureters, and kidneys. On the other hand, in every case in which the testicle was inoculated the disease extended to the vas deferens and prostate, but in no case did the other testicle or vas deferens become involved. The author states that he finds the explanation for his successes and failures in the generally known law that tubercle bacilli will never travel against the currents of fluids whether they be secretory or excretory; tuberculous infection may descend from the kidney or ascend from the testicle, but never vice versa. Clinically it has been noted that the disease may have the testicle as its primary focus.—(*American Journal of the Medical Sciences*, April, 1902, page 715.)

A. L. W.

The End Results of Castration for Tuberculosis of the Testicles.

—*Archiv für klin. Chirurgie*, Band lxiii, Heft 4.)

Bruns reports 111 cases in which the operation was performed; in 78 cases a one-sided castration, in 33 cases both testes were removed. In all these cases the vas deferens was resected high up, but the seminal vesicles and prostate were not touched. In 38 per cent. of the author's cases, the disease was bilateral. In those in which unilateral castration was performed, 23 per cent. ultimately developed tuberculosis of the other testicle, which usually is apparent within two years after the castration. It is probable that in fully one-half of these cases both testicles were involved at the time of the operation. Of the unilateral operation cases, 12 per cent. died of urogenital tuberculosis, 15 per cent. of tuberculosis of the lungs or other organs; but it must be noted that fully one-third of these cases at the time of the operation had tuberculosis of either the lungs, bones, joints, or glands. After one-sided castration, 46 per cent. of the cases remained cured for between three and thirty-four years. After bilateral castration, 15 per cent. died of urogenital tuberculosis elsewhere, and 56 per cent. of the cases remained cured, the period of observation varying from three to thirty years. In not a single case was there any psychic disturbance as the result of the bilateral operation. Owing to the discouraging results of castration performed in the presence of tuberculous involvement elsewhere, operation is contraindicated in these cases. (*American Journal of the Medical Sciences*, April, 1902, page 713.)

A. L. W.

Perineal Prostatectomy, by PARKER SYMS, M.D. (*Journal American Medical Association*, Nov. 2, 1901, page 1156).

Syms does not regard the Bottini operation as a sound surgical procedure, though he has had no personal experience with the method. It does not remove the hypertrophied prostate and can only partially relieve the obstruction in most cases. Secondly it leaves a slough to separate and come away through the urethra. Drainage must be through the burned wound, with liability to infection from the urine. Statistics published on the subject show that the operation is not free from danger and that it does not result in complete cure in the majority of cases. Prostatectomy is the preferable operation if the risks can be reduced so as to make it a feasibly safe procedure.

The author, in performing this operation, has been very fortunate, having lost no patient, and having had a complete cure in all his cases save two. In one case a former suprapubic cystotomy had left a suprapubic abscess which had firmly fixed the prostate so that it could not be reached through the

perineum. In the other there has been some trouble from incontinence of urine. Suprapubic cystotomy in this class of cases is dangerous and should be avoided. In 1898 he suggested that a small incision be made through the abdominal wall just above the bladder fold, through which the operator could pass two fingers and with them, push the prostate, bladder and all, toward the perineum, enabling him with a finger of the other hand to reach and enucleate the prostate through a median perineal incision. The author has never tried to put this suggestion into practice, as he thinks he has been able to devise a much simpler means for accomplishing the same object. This is a bladder retractor (illustrated in the article) which enables one to pull the bladder and prostate down into the perineum so that the lobes can be reached and enucleated with the index finger. It consists of a soft rubber bulb cemented on to the end of a strong rubber tube, caliber 38, French scale. It is introduced into the bladder through an opening in the membranous urethra, the bulb then being distended till it has a diameter of two and a half to three inches, by forcing a definite quantity of water into it with a piston syringe. The tube is then clamped and when pulled upon, it draws the bladder down in the direction in which it is pulled.

In performing the operation, the rubber retractor is pulled down and then bent up over the perineum and held there by an assistant. When the index finger of the right hand, the operator perforates the capsule of the left lobe and begins its enucleation. The middle lobe, and then the right lobe are enucleated in the same manner. The clamp is removed, thus emptying the retractor, which is then withdrawn from the bladder, and a large perineal drainage tube is introduced through the urethra to drain the bladder.

By this method the hemorrhage is comparatively slight and there is very little shock. The author feels assured that in this way every hypertrophied prostate may be removed through a simple median perineal incision, and after this is done there is not a very formidable wound to deal with.

The author has operated on nine patients by this method, their ages ranging from 53 to 75. All had cystitis except one. The residual urine varied from 3 to 5 ounces. All the patients have lived, cure being complete save in the two exceptions above mentioned.

A. L. W.

Prostatectomy Versus Prostatotomy in the Radical Treatment of Senile Hypertrophy of the Prostate, by RAMON GUITERAS, M.D. (*Journal American Medical Association*, Nov. 2, 1901, page 1156).

Guiteras describes at length the numerous operations devised for the relief of prostatic hypertrophy. All methods of relief have been discarded save catheter life, prostatectomy and prostatotomy. The catheter is used only when it is considered dangerous to perform one of the two operations mentioned, owing to the general condition of the patient; also prior to operation, with the object of treating the bladder and reducing prostatic edema or congestion.

The technic of the Bottini operation as modified by Freudenberg is described in detail. The results of this operation are most favorable; of 753 cases selected by Freudenberg in his last article, there were 622 successes, and 44 deaths, 12 of which were not positively due to the operation,—a total mortality of 5.8 per cent., and 17 failures.

Local or general anesthesia may be used. The writer prefers general anesthesia by nitrous oxid gas. Four per cent. solution of eucain or cocaine is

employed for local anesthesia. If cystoscopy is performed, the time required for it will usually be enough to allow the effect of the local anesthetic to pass off before the actual operation is begun, hence the writer advises either to use the cystoscope at an earlier date, or to again inject the local anesthetic after cystoscopy. It is advisable for this reason to omit cystoscopy just before the operation. In four cases under eucain anesthesia, the writer failed to pass the instrument owing to spasm of the vesical sphincter and nitrous oxid gas was substituted with successful result.

Perineal urethrotomy is sometimes advisable for drainage after the operation, in cases in which the gland is irregularly enlarged and the posterior urethra distorted by the hypertrophy.

Two methods of prostatectomy are employed by the author: (1) The vesico-rectal method, (2) the perineo-prevesical method, using counter-pressure in the space of Retzius.

The vesico-rectal method is the quickest method of removing a prostate known to the writer. With two fingers of the left hand in the rectum, and the index finger of the right hand inserted into the bladder through a suprapubic opening, the prostate is palpated bimanually. A pair of curved, sharp-pointed scissors is passed into the bladder, the points are thrust into the most prominent part of the gland, and the bladder opened, thus tearing the tissues covering the gland. The finger tip is inserted into this opening and worked around between the gland and the capsule, making counter-pressure with the two fingers in the rectum. After enucleation the floor of the prostatic urethra is cut through with the scissors, to prevent formation of a pocket, the patient is then brought into the lithotomy position, and an external perineal urethrotomy is performed, inserting a perineal tube for drainage. Another tube is inserted into the bladder suprapubically and the bladder wall sewed tightly up to it. This tube is kept in place for one week, the perineal tube kept in place for three or four weeks.

The safest method, though not so rapid as the one just described, is the perineo-vesical method. A suprapubic incision is made into the prevesical space without going into the bladder. An external perineal urethrotomy is then done, with the patient in the lithotomy position. A pair of sharp-pointed scissors is passed into the perineal opening, the capsule of the prostate is cut through after which the tip of the right index finger is pushed in between the capsule and the gland, and enucleation is begun, while counter-pressure is made over the base of the prostate by the finger in the prevesical space.

The prostate having been completely removed, a perineal drainage tube is inserted into the bladder, and the skin and superficial perineal fascia sewn up to it. The suprapubic wound can then be closed, or a drain left in for a day or so.

Comparing published statistics of prostatotomy with those of prostatectomy, it appears that in the former there were 82.5 per cent. of cures, 5.8 per cent. of deaths, and 11.5 per cent. of failures; while in prostatectomy there were 72.3 per cent. of cures or improved, 16.4 per cent. of deaths, or 11.2 per cent. of failures. The mortality in prostatectomy seems to be three times as great as it is in prostatotomy. In those who survive, the failures are about as frequent as in prostatotomy, but the recoveries are better. It is difficult to say what constitutes a cure in these cases.

The author considers it a first-class result if the patient can empty his

bladder of all the urine excepting perhaps 0.5 ounces of residual, especially if he is relieved of his symptoms. In general, it may be said that in those who do recover, the results from prostatectomy are much better and more permanent than in prostatotomy. In the former case, a repetition of the operation is never required, while prostatotomy must often be repeated.

Which operation is to be performed is to be determined by (1) the age of the patient, (2) the size of the prostate, (3) the condition of the kidneys and bladder. In general, middle-aged men with large prostates as felt through the rectum, having good kidneys and bladder, are cases for enucleation, while very old men with slightly damaged kidneys, and prostates that do not feel very large on rectal examination, yet causing considerable urethral impediment, are cases for prostatotomy. Old age *per se* is not a contraindication to prostatectomy. Very large prostates as felt through the rectum, are favorable for enucleation. Smaller prostates, in which there is a distinct impediment to the introduction of the instrument, together with considerable quantity of residual urine, are best for prostatotomy. In cases in which the gland seems very large per rectum, and in which there is a urethral impediment at seven inches or more, and the urethra is lengthened, hypertrophy of the lateral lobes probably exists, but if the gland is small by rectum and a similar condition exists as to urethra, the middle lobe is probably principally involved.

Diseased kidneys, whether medically or surgically involved, are always contraindications to surgical interference on the prostate, as post renal congestion followed by uremia and death, may take place. If operation is demanded, in these cases, prostatotomy is the operation of choice, the danger being much less.

A. L. W.

Nephrectomy—A Clinical Study of Four Cases, by L. J. LADINSKI, M.D.
(*Medical Record*, Feb. 8, 1902, page 212).

In the examination of the kidneys for disease, ureteral catheterization and cystoscopy with the Nitze instrument or its modifications, are the most important means at our command. When there is danger of possible infection from the bladder up into the ureters, the Harris segregator has been found very satisfactory, especially in the female. The X-rays have been used in a number of cases of renal calculus, but this method is not absolutely reliable, as a rule.

Cryoscopy, or the freezing test, is a test of the kidney function, not of its structure. If part of the kidney be destroyed as a result of some surgical disease, cryoscopy will determine if the remaining portion be functioning normally or not. The functioning capacity is also determined by the methylene blue test and the florizin test.

The changes in the urine in various surgical conditions of the kidney are fully described in detail. The principal symptoms are : (1) Pain, (2) hematuria and pyuria, (3) tumor, (4) frequent and painful urination, (5) polyuria or anuria, (6) febrile condition.

The differential points in reference to these symptoms are also mentioned in detail.

The cases reported are 1, calculous pyelonephritis, female, 18 years old. In this case the calculus had remained in the kidney pelvis about five years, producing interference with the outflow of the urine by its action as a ball valve, and causing enormous distension, inflammation and hypertrophy of the

kidney pelvis, and degeneration of the kidney proper. Once the diagnosis of calculus is made early operation is indicated.

Case II.—Tuberculosis of kidney; female, aged 33. The kidney, when removed, showed the presence of many cysts of various sizes, the largest being that of a hazel nut, situated mainly near the cortex, and some of which were filled with cheesy purulent material. These deposits were found to be tubercular under the microscope. The writer believes that the process in this case was an ascending one, judging from the fact that the patient had a protracted vaginitis, urethritis, and cystitis long before there were any renal symptoms. During many months previous to and after the operation, tubercle bacilli were found but once in the urine, though frequent and careful examinations were made.

Case III.—Adenoma of the kidney, or struma suprarenalis. Female, 55 years old. Hematuria was the first symptom, followed by loss of weight and strength. Diagnosis of stone in the kidney was made by a physician at that time.

On operation, the lower pole of the kidney was occupied by a large tumor, which extended toward the pelvis. The growth was soft, vascular, and friable, and bled profusely. The kidney proper was removed first, leaving the tumor in situ, as it was impossible to extract both at once. The tumor was then found to be intimately adherent to the descending colon, pushing the latter forward and toward the median line. By blunt dissection, the tumor was removed. Since the operation the patient has gained 30 pounds, and is better and stronger than she has been in years.

Case IV.—Acute suppuration of the kidney. Female, aged 19. The interesting points in this case were (a) the rapid extension of the infection from the vagina upward to the kidney; (b) the differential diagnosis between acute suppuration of the kidney and puerperal septicemia; (c) the immediate and remarkable improvement following incision into the kidney (the organ was removed in a secondary operation); (d) the comparatively little constitutional disturbance after abscesses had developed in the kidney.

A. L. W.

Cases Illustrating Ureteral Surgery, by HENRY C. COE, M.D. (*American Journal of the Medical Sciences*, January, 1902, page 1).

Coe reports three interesting cases in which the ureters were severed accidentally in operations involving the uterus. In each case the severed ends were brought together as rapidly as the exigencies would permit, with wholly satisfactory results. The writer declares that it is sometimes impossible, especially in cases complicated with intraligamentary tumors to identify the displaced ureters before they are injured, and, therefore, every suspicious cord, adhesion, or supposed blood vessel should be carefully inspected before it is clamped or ligated, and again after it has been divided. When it is established by the escape of urine, that a ureter has been divided, the injury must be repaired at once, unless the desperate condition of the patient makes this impossible. No fixed rules, as to the method to be adopted, can be formulated. Each must be studied separately.

A. L. W.

Impacted Calculus in the Urethra in Children, by JOHN H. JOPSON, M.D. (*American Journal of the Medical Sciences*, January, 1902, page 16).

Two cases are reported. The first, in a male child, three years old, was accompanied by urethral rupture and urinary extravasation, which was made

evidently by a painful and general enlargement of the scrotum and perineum, involving also the abdominal wall as high as the umbilicus, and laterally and somewhat below Poupart's ligament on either side. In one hour the edema was seen to extend downward on the thighs in a line parallel to Poupart's ligament.

Under ether, the prepuce was split up and a sound passed into the urethra. About two inches from the meatus a calculus was encountered. This was cut down upon and extracted. Incisions were made in the scrotum, and in both groins, to evacuate the extravasated urine, and an English catheter was tied in the bladder through the perineum, and the wounds dressed.

Until the third day the patient did well. On the morning of that day vomiting set in, the temperature rose to 106° F., falling again after sponging to 99° F. by the following morning, when a bright red rash developed on the body and limbs. A probably diagnosis of scarlet fever was made. The local condition improved, but the child became weaker, delirious and restless, and died about two weeks after the operation.

The nature of the fatal complication remains a matter of doubt. While it resembled scarlet fever, it might have been a septic condition resulting from urinary absorption. Powdered iodoform having been sprinkled over the wound at the time of operation must also be thought of. There were no other cases of scarlet fever at the time in the hospital.

Case II.—Male, three and a half years old; symptoms, pain and retention. A calculus was found in the bulbous urethra, and removed by a median urethrotomy, it being impossible to remove it per urethram. The child made a quick recovery. No symptoms of any kind were noticed in this case before the stone became engaged in the urethra.
A. L. W.

The Technics of Nephropexy, as an Operation per se, and as Modified by Combination with Lumbar Appendicectomy and Lumbar Exploration of the Bile Passages.—By GEORGE M. EDEBOHLS, M.D. (*Annals of Surgery*, Feb., 1902, p. 137).

Edebohls describes at great length the modifications of the technics of nephropexy that have been called for in his practice during the past three years, owing to the increasing knowledge concerning the relations between movable right kidney, appendicitis, and diseased conditions of the gall-bladder and bile ducts.

The relations between movable right kidney and appendicitis have demonstrated the necessity of removing the appendix in many patients who require operative fixation of the kidney. Removal of the appendix and anchoring the loose kidney are performed through one and the same lumbar incision, at one sitting. The peritoneum is opened on the outer side of the ascending colon. The appendix is found by following the longitudinal muscular bundles or bands of the colon downward to the cecum where they join at the foot of the vermiform process. The latter is delivered into the wound and either inverted entire into the caput coli, after tying off the mesoappendix, or else amputated, his own choice being inversion of the stump without ligation. The author has failed, for various reasons, in four out of fifty-six cases, in which he attempted lumbar appendicectomy. Of the 52 appendicectomies, the appendix was removed by inversion in 46 cases, and by excision in 6 cases. Only when appendicectomy is performed as a concomitant to right nephropexy, is the lumbar route indicated.

The writer believes, with others, that there exists an intimate association

between movable right kidney on the one hand, and cholecystitis, cholelithiasis, and their sequelæ on the other. In four successive nephropexies performed by the writer, lumbar exploration demonstrated the presence of gall-stones in two of the patients, and of chronic cholecystitis and pericholecystitis in the other two. Many hold the movable right kidney responsible for the disturbances in the biliary tract. His experience in this direction, embracing thirty-odd cases, demonstrates that direct examination of the gall-bladder may be made with satisfaction through a right lumbar nephropexy incision.

The author very frequently practises exploration through the lumbar incision on the occasion of a combined right nephropexy and lumbar appendicectomy. It is only necessary to enlarge the peritoneal opening required for the appendicectomy sufficiently to admit of free access to the gall-bladder, bile ducts, liver, duodenum, pancreas, pylorus, etc. He finds it unnecessary and uncalled for to go as far as Ferguson, who advocates preceding lumbar nephropexy by an anterior abdominal incision for the purpose of exploring the gall-bladder, the appendix, and the other kidney.

The history of nephropexy is fully gone into, credit being given to Hahn, as the father of the operation. In this country the operation was first performed by Weir, in November, 1882.

The operation must not be considered, as by some, as a minor kidney operation. The problem presented in performing nephropexy is briefly how to establish a new permanent anchorage for a movable kidney without damage, or with the least possible damage, to the organ itself, to surrounding parts and to the patient. With few exceptions all operators prefer the lumbar incision, and extraperitoneal operation and fixation. The classical incision running along the outer margin of the erector spinæ from the twelfth rib to the crest of the ilium, is employed by the vast majority of operators. The incision should leave the sheath of the erector spinæ unopened, separating but not severing the fibers of the latissimus dorsi, and deeper down opening the sheath and laying bare the fibers of the quadratus lumborum along the entire extent of its outer margin. Incision or blunt penetration of the transversalis fascia along the direction of its fibers brings us to the fatty capsule of the kidney and completes the approach to the organ.

The difficulty or ease of any lumbar operation upon the kidney, nephropexy included, depends very materially upon the degree of obliquity of the last rib and upon the endowment of the patient by nature with long or short twelfth ribs. A long twelfth rib and increased obliquity of the ribs generally coexist, and go hand in hand in rendering difficult approach to the kidney from behind. The author has been able in all his nephropexies and other operations upon the kidneys to overcome the difficulties connected with great proximity of the twelfth rib and ilium or with a long and oblique twelfth rib, by nicking the outer margin of the quadratus lumborum, at or very near its insertion into the crest of the ilium, to a greater or less degree according to the demands of the situation.

The so-called "kidney pain," in the outer side of the thigh and in the heel, and the hyperesthesia along the course of the iliohypogastric nerve, which so often follow this incision, are attributed to injury or section of the iliohypogastric or ilio-inguinal nerves, or both. This nerve damage may be avoided by drawing the nerve to one side.

Fixing the kidney in place is effected by means of sutures by most surgeons. The idea of deriving any aid whatsoever from the fatty capsule in supporting a

roaming kidney is fallacious, and its retention to any considerable amount facilitates the reacquisition of mobility by the kidney we have anchored. For the past three or four years the writer has made it a practice to remove the fatty capsule in its entirety in performing nephropexy, and others, probably influenced by the same considerations, have adopted the same practice.

As to whether there is a regeneration of kidney substance after injury or destruction by the passage of sutures through the parenchyma, the elaborate experiments recently recorded by Max Wolff seem to be the most convincing in this direction. Wolff finds that a new formation, a true hyperplasia, of uriniferous tubules and glomeruli never take place. The tubules and glomeruli in the remaining parts of the kidney simply undergo a compensatory hypertrophy. The epithelial cells of pre-existing tubules also undergo hypertrophy together with a very moderate hyperplasia. For the present it is deemed wise to base practical action upon these conclusions, although clinical evidence of the harmfulness of kidney sutures in man has as yet not been forthcoming.

Various operators have warned against fracturing the very friable kidney tissue by careless handling or undue traction upon sutures passed through the kidney substance. It has happened to the writer on three or four occasions to thus fracture a kidney with one of the sutures passed through its tissue. In one instance in the writer's practice, the transit of the needle itself through the kidney suddenly fractured the organ from the needle tract to the cortex; and it is quite possible that this accident was responsible for the three cases of urinary fistula following nephropexy that have been recorded. Taking into consideration the subjects of repair of the kidney after injury, fracture of the kidney by sutures, and urinary fistula following nephropexy, the writer abandoned parenchyma sutures as soon as he saw his way clear to a reliable capsule proper fixation method with denudation, but without suture, of the kidney parenchyma.

In considering the subject of anchorage, the writer believes that broad denudation of the kidney by stripping off a large area of capsule proper on the one hand, and laying bare the quadratus lumborum along its whole length on the other, will give the best tissues and largest surfaces available for firm and broad union. He anchors it squarely in the loin anterior to the quadratus lumborum muscle, and so situated that the middle part of the kidney fills the lumbar space, the upper pole projecting as far upward beneath the rib as the lower pole reaches downward below the level of the crest of the ilium.

The importance of maintaining the normal relations of the long axis of the kidney to the long axis of the body in performing nephropexy goes without saying. Unnatural anchorage and position of the kidney must certainly distort and stretch, to a greater or less extent, the renal vessels and the ureter, and expose the kidney itself to insults and traumatisms against which it is normally protected by the intervention between the organ and the external world of the osseous structures and the strong, thick muscles of the back. It has been shown that even ordinary palpation of the kidney for purposes of examination is generally followed by transient albuminuria and the appearance of blood and casts in the urine. How must a kidney suffer which, from its situation within the muscles of the back, is exposed to almost endless greater or lesser traumatisms?

The method, advocated by Myles, of nephropexy without sutures or tamponade is described. The perirenal fat is all removed; the capsule proper is split along its whole length; the glistening tendons of the quadratus and psoas muscles are laid bare; and the raw kidney is allowed to rest against this fibrous surface.

The comparative frequency with which different operators perform bilateral nephropexy varies greatly even in recent times. Bilateral nephropexy is especially indicated in patients in whom mobility of both kidneys is complicated with nephritis. Of seventeen such cases upon which the writer has performed nephropexy, the nephritis was confined to the left kidney in four, and to the right in four, while in nine it was bilateral. Bilateral nephropexy was performed upon thirteen of this group of seventeen patients.

The increasing frequency of bilateral nephropexy in the practice of the writer is shown by the fact that on his first fifty patients he performed bilateral nephropexy 10 times; on the second fifty, 15 times; on the third fifty, 28 times; and on the last thirty-six, 21 times.

The writer has performed in all 261 nephropexies upon 186 patients, of whom but 3 were males. In 108 cases the right kidney alone was anchored, in 3 cases the left kidney alone was anchored, in 1 case the right kidney was anchored twice, in 68 cases both kidneys were anchored at one sitting, in 6 cases both kidneys were anchored at two sittings. Total, 186 patients, 193 operations, 261 nephropexies. Of the 186 patients only two had a well-marked acute nephritis as a result of the operation. The affection ran a course of six weeks in one case and of two months in the other, and then permanently disappeared.

The writer finds on record nine cases of lumbar hernia following the operation of nephropexy. In five cases there was hernia of the kidney itself; in one the colon and intestines formed the contents of the hernial sac; and in three the protruding viscus or viscera are not mentioned. It is probable that the technics employed in performing nephropexy had something to do with the production of the hernia in the majority, if not in all, of the above cases. It is difficult to understand how a hernia can follow the lumbar incision carried from rib to ilium along the outer border of the erector spinæ, unless the incision be extended forward at either end, or unless the kidney be embedded in the muscles as part of the technique.

The author's present method of operating is described in detail, as are also the various steps by which his changes in technic have been brought about.

The mortality of the operation, judged by 846 operations, reported by 16 operators, is 1.65 per cent. Some of the deaths may be ascribed to causes other than the operation itself.

To determine whether a kidney has become detached after operation, the author depends on the extent to which the organ can be pushed upward toward the diaphragm. Unless he can crowd a kidney upward so as to make it disappear beneath the ribs, he regards it as anchored sufficiently well for all practical purposes. Judged by this test, not a single one of the kidneys anchored by the writer, has become detached.

A. L. W.

Total Extirpation of the Prostate for Radical Cure of Enlargement of that Organ.—By P. J. FREYER, M.A., M.D., M. Ch. (*British Medical Journal*, Feb. 1, 1902).

Freyer describes four cases in which he performed this operation, the patients ranging in age from 65 to 76 years, and the prostates removed weighing from 3 to 10¼ ounces. Misconceptions of the true anatomy of the prostate, cause this method of enucleation of the organ and leaving the urethra intact, to seem absurd. He believes that the organ maintains through life its dual character, consisting in fact, of two distinct and separated, encapsulated glan-

dular bodies, or prostates, lying closely approximated to each other, and adherent above and below the urethral canal. In declining life when the gland becomes adenomatous, the adhesions, or "joining portions" give way, thus facilitating the removal of the gland in its capsule, as a whole, or in two separate parts, the urethra being left behind intact.

In one of the cases described, the urethra was by accident torn across at its junction with the bladder. No untoward result followed, the patient making a perfect recovery. In this case the prostate came away entire, having the shape and size of a large pear; it had been drawn off the urethra, which was severed at the neck of the bladder, just as a bead is drawn off a string. Not only, the mucous membrane of the urethra, but the muscular covering as well, had been left behind, like a sleeve covering the contained catheter. On examination of the organ, it was seen that the lateral lobes were simply agglutinated together along the upper and lower commissures, and that by a little force, the separately encapsulated lobes could be peeled off each other along the middle line, thus demonstrating that the author's description of the prostate as consisting of two encapsulated lobes applied face to face along the middle line, and adherent above and below the urethra, is correct.

"Atony of the bladder" so-called, he believes, does not exist, even in the most advanced cases of the disease. The bladder walls retain their expulsive powers even when catheterization has been carried on for years. The efforts of the bladder walls to empty the organ of urine, are thwarted by the obstruction caused by the enlarged prostate; and though in the early stages of the disease, a so-called middle lobe may impede the flow, he is convinced that in the later stages the lateral pressure exerted on the canal is the main cause of the obstruction. Examination of the prostates removed show that where a so-called middle lobe exists, it is found to be merely an outgrowth from one of the lateral lobes.

A. L. W.

Remarks on Ten Cases of Movable Kidney.—By J. SCOTT RIDDELL, C.M., M.B., M.A. (*British Medical Journal*, Feb. 1, 1902, page 255).

The author distinguishes between "floating kidney" and "movable kidney." The former is a congenital condition, the peritoneum being so arranged as to form a distinct mesonephron of such length as to allow the kidney considerable play. It is more common on the left side. "Movable kidney" is acquired, usually found on the right side, and eight to ten times more common in women than in men. If it be present in a man, it is usually on the left side.

The tunica adiposa of the kidney encloses the organ in its meshes, and is firmly attached to the peritoneum in front and the loin posteriorly, forming a real *ligamentum suspensorium renis*. Outward and inward movement are limited respectively by the renal vessels and the mesocolon. Intraabdominal pressure and the protection of the ribs tend to prevent displacement. Limited displacement may take place as the result of strain, trauma, external pressure, or drag. This is followed by congestion and enlargement of the organ, which in turn brings about a distension of the retaining fatty capsule. None of the theories advanced to account for the greater frequency on the right side, is satisfactory. It is equally difficult to explain the intimacy between movable kidney and menstruation.

The pains occurring in the acute attacks, are caused by the twisting of the

renal vessels, particularly the vein, by rotation of the kidney. Incarceration of the kidney was formerly incorrectly thought to be the cause.

Diagnosis is best made by palpation; percussion gives no help. For examination the patient is placed on the back with the legs drawn up and recti as far as possible relaxed. With one hand in Israel's line in front, and the other in the loin, one can usually displace a movable kidney. Franks' rule with regard to the normal and abnormal movement of the kidney is quoted.

Of the ten cases described, five were nephropexies, all of which resulted in cures; three were nephrectomies, performed for severe hematuria, extreme hydronephrosis and fibroma, respectively; results were satisfactory; in two cases palliative treatment has been resorted to for various reasons. A. L. W.

Methods of Incising, Searching and Suturing the Kidney.—By HOWARD A. KELLY, M.D. (An address, published in the *British Medical Journal*, Feb. 1, 1902, page 256).

The ureteral catheter is of value in conditions where stone is suspected in two important ways, 1, before operation, the kidney pelvis can be thoroughly washed out with boric solution or weak carbolic acid, thus washing away the pus and rendering the surfaces relatively clean; 2, after washing out the pelvis, the catheter should be left in situ, the kidney being then exposed by the lumbar incision. Before the kidney is incised, fluid is forced rapidly into the renal pelvis so as to distend the pelvis and cause the kidney to swell up, making prominent certain landmarks which serve as a guide for a correct incision into the organ. If the kidney is grasped in the full hand during the distention, the exact position of the calices can be detected, as the organ alternately swells and collapses as the fluid is forced in. Sacculations and thinnings of the cortex are easily seen in this manner. Where calculi are present the antero-posterior diameter is sometimes increased up to 1.5 cm.

The distention of the pelvis and calices serves to further separate the two vascular systems found in the kidney, as pointed out by Broedel, thus reducing the hemorrhage to a minimum. The best place to incise the kidney is down through the lateral portion of the posterior pyramids between the anterior and posterior vascular trees. The worst possible incision is one that follows the course of, or wounds largely the vascular column found in the cortical septa between the pyramids. The best incision leaves about $\frac{3}{4}$ of the kidney anterior and $\frac{3}{8}$ posterior to the incision. Where suturing is advisable, three sets of sutures may be used to advantage; 1, fine catgut sutures placed between the calices, including the fat and fibrous tissues without involving the mucous surfaces; by this means the pelvis is approximated. 2. The most valuable set, consisting of one or two series of mattress sutures introduced with a straight slightly blunted needle, extending through the entire substance of the kidney; these control the bleeding. 3. For perfect accuracy, a continuous catgut suture, through the capsule.

A. L. W.

Clinical Observations in the Treatment of Severe "Stammering" Bladder and Urethra—By E. HURRY FENWICK, F.R.C.S. (*British Medical Journal*, Feb. 1, 1902, page 261).

Fenwick urges that the term "stammering" of the bladder, be confined to those patients, male or female, in whom urination cannot be effected at will, although all the organs for the completion of the act are sound and anatomically

perfect. False stammering should be applied to those cases of prostatic inflammation, senile enlargement, atony of spinal origin, or of urethral stricture which suffer from so-called nervous stammering, but in whom there is a distinct change, a deviation from health which induces reflex irritation, setting up the inco-ordination in the muscles regulating the expulsive effort.

True urinary stammering begins in youth, at or about puberty. The impression that it is caused by failure of the sphincter of the bladder to relax while the detrussor contracts, is not correct. The true cause is often a tonic spasm of the compressor urethra, and the cure is a longitudinal section of that muscle. If a terminal eyed catheter be passed until its eye rests in the membranous urethra, and the patient is told to urinate, he does so without any difficulty. If the spasm were in the sphincter, no urine would flow through the catheter. Moreover, section of this muscle has restored the patient to free and healthy urination, if the bladder has not become atonied through neglect. Latterly, merely tenotomizing the compressor urethra without opening the urethral tube, has produced a similar satisfactory result.

A. L. W.

Partial Nephrectomy—By B. G. A. MOYNIHAN, M.S., F.R.C.S. (*British Medical Journal*, Feb. 1, 1902, page 263).

Three cases of partial nephrectomy are described. The first was a cyst of the lower pole of the kidney, which was removed, together with the small portion of the organ which bore the cyst. The kidney wound was sutured with six deeply buried sutures of catgut. There was no bleeding. Recovery was without incident. The second case was a solitary cyst in the connecting band of a horse-shoe kidney. The cyst was removed, together with some of the kidney substance. This created two separate kidneys, each with a sutured wound at the lower pole. The patient fully recovered. The third case was a myxosarcoma of the lower pole of the right kidney, in which half of the organ was removed. Recovery also followed.

A. L. W.

A Preliminary Note on the Sterilization of Catheters; A Bacteriologicall Study.—By C. B. NANCREDE, M.D., and W.H. HUTCHINS, M.D., (*Medical News*, Nov. 23, 1901, p. 806.)

This is not the report of a completed study, though it already emphasizes the important fact that all of us must have often employed unsterilized catheters, when believing that they were sterile.

Using a mechanically cleansed new catheter for each patient, would practically secure freedom from infection. But when the same catheter is used for more than one patient, as is so often the case, the danger of infection is still great, in spite of the perfunctory methods of sterilization usually employed in private practice.

Sixty-five experiments were made, details of which will be given later. The germs employed were pure cultures of colon bacillus, staphylococcus pyogenes aureus, and bacillus pyocaneus and streptococcus pyogenes. Known quantities of these germs were put in bouillon and grown in incubator at 37.5° C. for twenty-four hours. New catheters were then immersed in this infected bouillon for five minutes, drained, and aseptically dried. After being subjected to the sterilizing agents, pieces of these infected catheters, or whole catheters, were introduced into sterilized receptacles, containing culture media, and incubated for from twenty-four to forty-eight hours.

The authors' conclusions from these experiments are: 1. That an infected soft rubber catheter cannot be completely sterilized by boiling under four and one-half minutes. 2. Mechanical cleansing from all dried pus, coagulated blood or mucus, will render sterilization easier, and will demand a shorter time to be effective. 3. Elastic (English web) catheters and soft rubber catheters can be repeatedly boiled for five or more minutes without roughening of their surfaces or diminution of their elasticity and strength. 4. Chemical sterilization by immersion in a 1:2,000 mercuric chlorid solution for five minutes does not sterilize any variety of catheters *which has become infected*, at best only inhibiting the growth of the germs, for if the mercuric salt be precipitated by ammonium sulphide the germs will grow freely when implanted in culture media. 5. The results of experiments indicate that chemical sterilization should never be employed for catheters which are to be retained in the bladder for some time, unless subjected to a very prolonged action of the mercurial salt, lest the merely inhibited germs develop. 6. Should corrosive sublimate be employed for the sterilization of catheters, it must be in a concentrated solution and the catheter must remain in it for a much longer time than the usual period considered amply sufficient in the laboratory, no mere washing with any chemical solution being efficient for *an infected instrument*. 7. Formalin vapor will sterilize infected instruments in twenty-four hours; how much shorter time will be sufficient, has not yet been fully determined. 8. All methods of sterilization commonly employed should be continued for much longer periods than the minimum time required for destruction of germs in the laboratory. 9. English web catheters can apparently be more readily sterilized by heat than can soft rubber catheters, probably on account of their interior construction.

The authors point out that the germs used in these experiments were probably less resistant to sterilizing agents than are those of the same species actually contaminating catheters which have been employed for cases of cystitis, because of the well-known loss of virulence of germs long cultivated upon artificial media. In future experiments it is expected that this defect will be removed by the employment of germs taken from actual cases of cystitis, when the justice of the statement of Guys that to insure sterilization of an infected catheter it should be boiled thirty minutes, will doubtless be recognized.

A. L. W.

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A CRITICAL REVIEW OF L. PHILIPPSON'S PROPOSED REFORM OF DERMATOLOGY.*

BY DR. HERMANN G. KLOTZ,
New York.

EVER since the diseases of the skin began to be considered and studied in a scientific manner, a large amount of conscientious and creditable work has been produced and is still being brought forth by earnest students among the medical profession in all civilized countries and an immense material has been accumulated and placed at our service. Everywhere dermatology has assumed a commanding position among the special branches of medicine. Nevertheless if the question is put to you, whether the study and the teaching of this our special field are founded on a thoroughly satisfactory, truly scientific basis, I doubt whether many amongst you would be ready to answer absolutely in the affirmative. Two well known and undisputed facts alone demonstrate how far away we are from an ideal position: on the one hand the experience that the diseases of the cutaneous integument, which is immediately exposed to the scrutiny of our senses and therefore ought to be the best known portion of the human body, to a large number, probably to a majority of the members of the medical profession are the most obscure and often bewildering phenomena. On the other side we see the incessant but so far unsuccessful efforts, continued through more than a century, of those interested in and occupied with the study of dermatology, to formulate a system under

* Read before the American Dermatological Association, Sept. 18, 1902.

which all the pathological changes of the skin would be satisfactorily distributed and classified. By having given up, for the time being at least, all classification and having accepted simply the alphabetical order for the diseases of the skin, we have ourselves acknowledged the existence of such a condition. If, then, there is something rotten in the state of dermatology, it is but natural that from time to time voices should be heard pointing to its wants, trying to find out the underlying causes and indicating means to bring us nearer to a perfect understanding of our discipline. Whenever such efforts are made in a truly scientific spirit, they certainly deserve to be carefully considered and judged on their merits. While a single man's work may not be perfect or complete, it may contain some points of importance and of merit, and may help in some way to smooth the always rough and difficult path of reform. This seems particularly the duty of our Association, the avowed aim of which is to promote the study of dermatology in all its relations.

Within the last years my attention and probably that of not a few among you has been attracted to several publications of L. Philippson, assistant to Prof. Tommasoli at the dermatological clinic of the University of Palermo, Sicily. In 1895 he published conjointly with L. Török of Budapest, like himself a pupil of Unna: *General Diagnostics of the Diseases of the Skin, founded on Pathological Anatomy*, and during last winter in the *Archiv für Dermatologie* (Vol. LVIII.) an article: *The morphologic tendency and the anatomical-genetic tendency in the dermatology of the present day*. It occupies 56 pages of small print, which are not exactly easy reading even for a German, particularly as it is almost impossible to follow the author without a certain knowledge and understanding of his book. Under these circumstances, although I know that you are all more or less acquainted with the German language, and are interestedly following the progress of dermatology in European countries as well as in our own, I may be pardoned for assuming that not many among you have found the time and the patience to give as much attention to such an article as it seems to deserve and as you should have liked yourselves to bestow upon it. Therefore I have felt justified in trying to give you a review of Philippson's ideas and furnish an opportunity for discussing the same here.

Philippson's essay on the morphologic tendency and the anatomical-genetic tendency in modern dermatology is divided in two parts and contains a critique of dermatology as usually studied and taught today, and the principal outlines of a reformed or rather remodelled and revised dermatology. The title was chosen by the author to indicate that there exists already a current in dermatology which endeavors to

replace the dominant influence of the doctrine of the efflorescences or elementary lesions by exclusive attention to the anatomical and genetic features of the cutaneous diseases.

The first part arraigns the dermatology of the present day for remaining under the influence of the theory of the elementary lesions and allowing it to be paramount in teaching and studying. These elementary lesions, which are claimed to represent the fundamental phenomena, of which all the pathological conditions of the skin are composed, are in reality nothing but small circumscribed foci of diseased skin. Adopted in the early times of dermatological observation, when the morphologic features alone offered themselves for the differentiation of the various pictures of the diseased skin, partly taken from the ordinary language of daily life, the names of these elementary lesions do not describe, signify or even suggest any definite anatomical or histological change of the tissues, but only the physical features and the limits within which they present themselves to the eye. If Kaposi has defined the efflorescences as morbid changes, generally restricted to a small circumscribed area, which in form, development, progress and anatomical character present a definite type; he has given them a much wider scope than they are entitled to and has rather indicated what we ought to be able to learn from such important features. An elementary lesion, for instance a papule, may be produced by entirely different anatomical processes, may be of varying structure and may follow an entirely different course under different circumstances. But the worst is, that the terms used for the elementary lesions are by no means definite or exact even in regard to their morphologic significance; various authors greatly differ in their description, and one calls a papule what the other calls a nodule, etc. Under these circumstances it seems strange, that dermatology, after entering upon new and modern paths of investigation, has not discarded this obsolete doctrine and adopted a different, an anatomical foundation. The reason for this continued prevalence of the old standpoint probably has been, that indeed some pathological processes in the skin not only frequently appear in such circumscribed form, but that a number of them always appear and remain so during their entire course. But this very tendency of certain processes, to be restricted to small areas, rather than the areas themselves is a peculiar feature and deserves the most careful investigation in regard to its anatomical causes. Whether the elementary lesions themselves are essential for a pathological process, will have to be determined in every single case. Having demonstrated what the doctrine of the elementary lesion really amounts to, and that it is not fit for a foundation of dermatological studies and instruction, Philippson

traces its mischievous influence through the different stages of dermatological work, beginning with the description of the diseased conditions of the skin. He then explains how it directs the diagnosis into its channels, how it guides pathological investigations, how it is responsible for the peculiar conception of what constitutes a disease and for the strange character of much clinical work, how it controls now just as much as ever the formation of new diseases and how now and then it is revealed as the real motive for so-called difficult problems. It would be interesting enough to follow Philippson more closely on his critical raid through the dermatology of the present day, but it would be almost impossible to do justice in a review to the large amount of detail and the numerous citations from the books of various authors, particularly of Kaposi, Besnier, Brocq and others. The habit of temporarily dropping a subject for another to return to it later, and frequent repetitions do not contribute to render the paper easy reading and to readily understand the author's purpose. Here and there a certain animosity and the influence of some prejudice become apparent, but in general Philippson makes out a good and strong case and opens the eyes of the reader to many shortcomings and open faults and errors of our conventional way of doing things in dermatology. After all it must not be understood that Philippson denies the existence of the elementary lesions or even their right to be recognized, but he wants them to be considered only in connection with the anatomical process of which they indeed form only a part. In fact his real objection is more to the habit of making a diagnosis not only of the conditions of the skin but of a real disease from the physical and morphologic appearance of the diseased skin, be they circumscribed or diffuse, although the latter usually are hardly considered because they are not typical.

In the second part Philippson calls attention to the exceptionally favorable position which dermatology occupies in comparison with medicine in general and with other specialties, because the organ with which it has to do is spread out for the immediate appliance of our senses of sight and of touch in its various branches. In examining the diseased skin, we necessarily perceive certain anatomical changes. The dermatological clinic therefore really is the study of pathological anatomy on the living organ, and the symptoms with which it has to do are the anatomical changes produced by some pathological process. Generally the pathologist's work is limited to the demonstration on the cadaver of certain deviations from the normal conditions just as they exist at a certain time. But on the skin we are in the position to follow the anatomical changes from the beginning to the end, we can at-

tend step by step the several phases of development of the process and we can immediately trace the relations of the various changes to the various stages of the process itself. Therefore it becomes our duty always to investigate the diseased skin with the view of ascertaining the anatomical changes and the anatomical process which causes them, but not to be satisfied with taking notice of the physical and morphologic appearances of the changes only, to describe them in conventional terms and give them the name of a disease. In order to accomplish this in an intelligent manner, we must have a somewhat remodelled general pathology, to teach the nature of the anatomical processes, and general diagnostics to teach the means for recognizing them on the living. The rules and teachings of the general pathology of the human body to a certain extent apply at once to the general pathology of the skin, but on account of the peculiar construction of this organ and of its exceptional localization, not all of them can be immediately made serviceable for this purpose. Such a general dermatological pathology will include general pathology and general etiology, but as a peculiar advantage also the genesis of the anatomical process. It can describe the development of many anatomical changes, which on other regions of the body become the object of examination only as finished products. Certain local disturbances of the blood circulation, the conditions of inflammation, the results of embolism and metastasis, for instance, cannot be observed as well on any other organ; many biological features of various progressive and retrogressive changes, particularly those of the granulomata and of tumors have been much better studied on the skin than on any other organs; certain features of the blood vessels, of the tissues themselves and even of the entire organism become conspicuous on the skin, which are absolutely unknown or but very little understood on other organs. In particular we are enabled to gather exact knowledge of the relations between some cutaneous changes and their causes, principally the pathogenic micro-organisms.

The principal contents of such a general pathology have to be and to a large extent have already been furnished by clinical observation, but a great deal has erroneously found its place in the present special pathology. For here we find under the guise of special diseases a number of morbid processes which may appear under the most different conditions and therefore have to be considered as general forms of disease, of right belonging to general pathology. What is now described as dry and moist eczema, as lichen simplex, as erythema will figure as special forms of inflammation; from the development of erythema multiforme and nodosum, purpura, pemphigus, etc., we gather the material for the general description of embolism and metastasis.

Still many blanks will remain to be filled by investigations to be made for this special purpose but principally in the clinic. Such a general pathology will not be theoretical only but being mostly clinical will include practical knowledge as the basis for the general diagnostics. General pathology and general diagnosis will complete the dermatological propædeutics. The book on general diagnosis illustrates Philippon's ideas of these chapters, but I have to leave its consideration until later on.

The special pathology from which a large portion has been eliminated and placed in the general pathology, will be greatly reduced in volume, but it will contain only cutaneous diseases the conditions of which are exactly known or sufficiently so at least for the demands of clinical purposes: diagnosis, prognosis and therapeutical indications. Mere combinations of symptoms ought to be relegated to general pathology unless besides the changes in the skin other symptoms or other signs of disease can be found, which bear legitimate relations to each other. The reduction of the number of real diseases will deliver us of a large portion of our previous bewildering nomenclature and will do away with some of the confusion, which has been created by the promiscuous use of the favorite traditional terms. It will also facilitate the introduction of order into the contents of the special pathology and a satisfactory classification of the diseases.

In describing the morbid changes in the skin we must follow some definite rules, so as to outline the complete history of the anatomical process. The description, therefore, must not be restricted to the consideration of the small circumscribed foci; they will be considered only in so far as they form a part of the anatomical process. We then shall not gather as heretofore a number of pictures without any organic relations. Many simple facts will appear as the natural consequences of the anatomical process and will need no further explanation, as we become acquainted with them from the general pathology, and we shall be able to dispense with much of the peculiar terminology which can be understood only by the specialist, and contributes so much to making dermatology a sealed book to many physicians.

In order to give such a description, we must apply a careful examination and observation to the diseased portions of the skin at the hand of our general pathology and diagnosis. We must define the topographical seat of the anatomical disturbance, the general pathological character, the mode of their first appearance, the development of the primary and secondary foci of the disease. We must directly search out the anatomical changes exactly as it is done on the cadaver, not only the macroscopical but also the microscopical ones. As the skin

is spread out in a comparatively thin layer, we can recognize on the living organ a great deal more of finer detail than on the dead, particularly the local disturbances of blood circulation, either if independent or if accompanying other anomalies. If we cannot clearly define the seat or nature of the anatomical changes with the naked eye, a microscopical examination must necessarily be made, preferably by means of serial sections. Should the microscope fail to furnish a satisfactory explanation, we must for the time being be satisfied and not insist on making the diagnosis of some disease or establish a new one on the strength of the morphologic features as has been the habit, often enough with the result, that cases of similar morphologic appearance but of totally different histological structure have been joined under the name of one disease.

In such an examination *all* morbid changes have to be equally considered, small and large, of regular shape or undefined, extensive or circumscribed. Where diffuse, irregular patches are found besides typical or circumscribed ones, they deserve not less recognition, or even more if they develop from the latter. Where *only* circumscribed lesions occur, special investigation will be required, whether they are a natural consequence of the process or of the structure of the skin. It will be of great importance to distinguish between primary and secondary foci of disease, partly because the early changes may differ from the latter ones, partly because in the primary foci certain features may become manifest, which are intimately connected with their origin. From the mode of their first appearance we may be able to draw conclusions not only in regard to the direction from which the irritating cause has entered the skin and in regard to the path by which it has entered, but also in regard to its general nature. The first manifestations may vary greatly as to their location, age, number, distribution and arrangement, and the rapidity of their appearance depending whether the causes affect the body from the outside or from the inside, be it by contiguity directly from underlying organs or by embolism or by way of the nerves. It will also be considered insufficient to state the condition of the skin as found at one certain stage. Quite different processes may exhibit at a given time similar or apparently identical features, the significance of which can only be recognized by giving close attention to their development. For the same reason the termination of the processes has to be studied, because some of them reveal their true nature only in their last phase. This is simple enough, if we can follow a case from the very beginning to the end, but if our observation commences only at a certain later period of the development, a methodical investigation will be required to assign all

the different and various changes to their proper places. Here the discernment of the primary focus will be of material assistance.

Finally it must be remembered, that many circumstances may influence the appearance of the morbid changes, which are entirely independent of the pathological process itself. Such circumstances may be located in the organism itself or may depend on external factors. The irritability of the blood vessels here plays an important part, varying within very wide limits. Among the external influences therapeutical measures, which have previously been employed, may greatly alter the appearance of the anatomical changes; infection with pyogenic micro-organisms an independent pathological process, running its own course, may be implanted on the original conditions. In such cases it may become necessary to wait till the complication has run its course, before we can resume the consideration of the original process.

The part of the microscopical examination in the new order of things has been mentioned already: it will not be optional any longer but forms an essential part of the clinical examination. It accompanies the clinical observation and steps in when the former cannot proceed any farther, and its results obtain their real value in so far as they become immediately connected with the clinical facts which depend on the anatomical process. The essential features of the changes, their seat and nature may occasionally be determined only by the microscope, and so the imperfect clinical examination may be rendered complete. There exists, therefore, the most intimate reciprocity between the histological examination and the clinical observation, none can stand without the other and the former cannot be allowed to proceed independently.

The examination of the diseased skin and the definition of the evolution of the anatomical process form the first part of our clinical work and lead for the time being only to an anatomical diagnosis, leaving the definition of the disease itself, the diagnosis proper, to the future. This may seem to be a mere formality, but in reality offers many advantages. Having reached a definite conclusion in regard to the anatomical process, a natural position for a temporary rest is afforded, which we do not find under the present method, when we are accustomed after the examination of the skin to immediately find the name of a disease which we can apply to the morphologic, perhaps also to the anatomical features which we have found. It is true such an immediate adoption of the name of a disease offers some advantages, in so far as it furnishes some indications as to the probable progress and the termination of the morbid changes, or perhaps also to the anatomical nature which we have not been able to define by immediate

observation. But such a proceeding also invariably leads to a complicated differential diagnosis, to the comparison with a number of quite heterogeneous phenomena, which the anatomical diagnosis renders entirely unnecessary. Under the usual methods we are unable to consider independently the diseased conditions of the skin without the traditional name of some disease, and while we are not quite ready to adopt such a one for the final diagnosis, we speak of *an* eczema, *an* erythema, etc., committing ourselves to the name more deeply than we really intended. This is particularly likely to occur, if we are not able at once to make a decided diagnosis, either because we see only the early stage or an abortive or fragmentary condition of some anatomical process, or because the case presents entirely strange and unusual features. With an anatomical diagnosis we can be contented for the time being, and wait for further developments. The anatomical diagnosis also gives due weight to the results of the histological examination, while usually we find them in the text books added to the description of the disease as a separate and independent paragraph, often without any influence on the diagnosis.

Often we may be able to complete the genesis of the anatomical changes by directly fixing its cause, for instance in cases of artificial dermatitis, of drug exanthemata, of many pus affections, of infections with fungi. Then the anatomical diagnosis completes our work, for it would be superfluous to attach any special name which would only obscure the understanding. Otherwise the establishment of the anatomical diagnosis leaves us entirely free to complete the examination of the patient according to the usual clinical methods. This is of particular importance, if we have to do with diseases which depend on conditions located not within the skin but in some interior organ of the body. We are then not bound in advance to adopt the diagnosis of a certain classified disease because its skin changes are similar to those of the given case, but we shall identify it with that disease if it agrees in every way, in regard to the relations of the skin changes as well as with the internal conditions. We thus are able to avoid the names of diseases, which are often used, for all cases exhibiting similar conditions of the skin, although they may be of entirely different pathological character.

If then we follow the course advised by Philipppson, our experience will be the following: Either we are really able in a given case to recognize a classified disease or we are not. This will happen if we have to do with one of the diseases which Philipppson calls variable ones, that is diseases which have been established only on the basis of identical skin changes and include radically different processes. We then must

try to complete the anatomical diagnosis by all possible clinical facts and in accordance with these to form our judgment. This would end the diagnosis but would put us under the obligation to look around in literature for similar cases, which in one way or other may complete our own observation; however, we must not depend in these cases on the names but on the facts.

At present the student who begins instruction in dermatology is introduced to an entirely new doctrine, which usually impresses him as strange, as he finds great importance assigned to certain features, the elementary lesions, of which he had no previous understanding. Under Philippon's plan instruction will begin with the general pathology, which will in its principal features not differ much from the general pathology of the human body, only it will consider more exactly the evolution of the anatomical process, which it watches on the living organ. On the anatomical conditions as observed in the living patient general diagnostics will be founded. If the morbid conditions of the skin are presented to the student simply as anatomical changes they may at first seem to be of but slight importance, because he is used to much more conspicuous changes from the other clinics, particularly from the surgical one; at the same time he may be somewhat bewildered by the large number of observations, but gradually he will become interested in the biological features of the pathological processes. He will probably feel somewhat embarrassed at first, when he is called upon to make an anatomical diagnosis only, because he is accustomed to look on every patient as an example of some disease and to regularly end the examination by making the diagnosis of a disease. As the number of acknowledged diseases will be much smaller than it is now, and as the description of the disease in a given case will contain the complete evolution of the anatomical process, which itself furnishes the important points for their distinction, the diagnosis of the disease itself will be much easier. It will only require the consideration of the other symptoms and features of the disease. The traditional differential diagnosis with its complicated tables will be unnecessary, because it is founded only on the similarity of the morphologic appearances. Differentiation really has to take place during the examination of the anatomical changes, when we have to determine their seat, their size, their character, their development, etc. It may happen that we are not able to reach a final conclusion, but that it will be necessary to consider all the circumstances which form the obstacles to the recognition of the true facts, questions which belong to general diagnosis. In special pathology only well studied diseases will be considered. In describing new diseases, we shall have to follow

the same principles, which are generally accepted in medicine and if we are not able to find sufficient facts, we have for the time being to give a place to our observations in general pathology. It will therefore not be absolutely necessary to close our clinical work with the definition of a classified disease, but if we cannot do so, we will accept as an equivalent the anatomical-genetic diagnosis under consideration of all the pathological phenomena and conditions or we must be contented with such a diagnosis as the best we can accomplish.

So far Philippson's article. For a better understanding of his plans I have to give a brief summary of the general diagnostics.

Philippson and Török's General Diagnostics are divided into diagnosis of the pathological anatomical processes of the skin and the diagnosis of the cutaneous diseases. The first part begins with the consideration of general pathological conceptions as applied to the skin. Inflammation, the most important process, is first taken up: In all inflammatory processes two different actions can be distinguished: the one, the direct and characteristic effect of the pathological agent, occurs on the place where the influence is most strongly felt; the other, which is not characteristic for the pathogenic agent takes place in the environs of the spot of entry and accompanies the most various pathological processes. It particularly presents features corresponding to what generally is called inflammation. These changes depend on a general biological quality of the organism, its irritability, and can be denominated as the phenomena of reaction to irritation (*Reactive Reizerscheinungen*). They may be subjective, becoming manifest as itching, burning, pain, etc., or objective, clinically represented by congestive hyperemia with or without edema, histologically also by cellular emigration from the blood-vessels of the red and white corpuscles, and by proliferation of the fixed connective-tissue cells; the most common form of pathological changes. Inflammation is, therefore, not used any longer in a pathological-anatomical but only in a clinical sense and then only when the four cardinal symptoms are present.

For the diagnosis of the anatomical process the changes immediately due to the damaging agent have to be considered, not the reactive phenomena, which are identical under all circumstances, differing only in the degree of intensity. These ideas concerning inflammation predominate to a large extent throughout Philippson's arguments. Besides, other processes not resulting in skin desquamation and the formation of vesicles and bullæ are given particular attention; scaling in most instances is a secondary condition, the underlying cause having to be looked for in a disturbance of the mucous layer of the epidermis, which serves to define the anatomical process. Then follow

remarks on the normal anatomy and physiology of the skin, the furrows and folds, the papillary layer, the epithelium, the transparency, and peculiar conditions of the skin due to age. Next are enumerated the clinical signs of the anatomical processes in general and as depending on the anatomical structure of the skin, how they manifest themselves if situated in the papillary layer or in the epidermis or in both these regions together, the characteristic signs of cutaneous and subcutaneous changes, the differences in color, consistency and the influences of the location on certain regions of the body. The consideration of all these features leads to the anatomical diagnosis.

In the second part on the diagnosis of the disease itself the significance of the anatomical process in the skin for the disease itself is the first subject considered. In a number of cases we find not an active process any longer, but the finished results of a process which may have run its course during intrauterine life or later during childhood or adult life; such conditions are designated as deformities (*Missbildung*).

Among the active processes the clinic meets with the most various changes in the organism during their course. The most simple conditions prevail where we find evidence that some mechanical, chemical or thermic influence has affected the skin. In certain cases only the character of the tissue degeneration alone in connection with the reaction phenomena allows us to make a definite diagnosis; usually we find only the reaction phenomena without any characteristic features, calling attention only to the fact that some irritation has taken place, the nature of which has to be determined by clinical, mostly anamnestic means. Similar conditions prevail, where we find the reaction phenomena without any direct degeneration of the tissue in the shape of more or less transient and more or less extended erythema, edema, formation of vesicles, etc. These functional disturbances of the circulatory apparatus only point to the fact that we have to look for the important etiological factors not in the skin but in the interior organs of the body, since the changes in the skin are not characteristic nor important enough to establish a disease, but form only one amongst other symptoms, from which the diagnosis has to be made. The papules which accompany some of the pruritic diseases, the erythematous and urticarial conditions, hemorrhages, desquamation, ulcers, etc., do not show any histological differences, nor do the syndromes like lichenification, eczematization, the urticarial skin lesions and the results of functional disturbances of the blood-vessels which are grouped together in erythema multiforme, dermatitis herpetiformis, pemphigus, and similar diseases. Besides these cases, where the conditions of the skin ap-

pear either as the consequences of some external injury or of some internal disturbance there exists a large group in which the anatomical changes evidently depend on causes which are localized in the skin itself and the pathological process, which under certain circumstances may be sufficient for the diagnosis, exhibits its characteristic features in that organ alone.

After a brief consideration of the course of the pathological process in the skin and of the course of the diseases in general some remarks on the sensation of itching lead to the chapter on the definition of the limits of dermatology. A clinical specialty must include only diseases, the most essential constituents of which are localized in that special organ. Into clinical dermatology we therefore can admit (1) the deformities, (2) the affections which are caused by the direct influence of mechanical, chemical and thermic forces and are restricted to the skin during their entire course; (3) pathological processes, the cause of which is localized in the skin and there develops its effects, particularly if other organs of the body are not affected by it; (4) pathological processes, which appear only as symptoms of some internal trouble, but in which the cutaneous symptoms are clinically so prominent that the patients usually come under the observation of the dermatologists.

The last part of the book is devoted to the demonstration of the necessity of a classification and of its principles and to the classification itself. The four conditions for the admission of diseases into dermatology conveniently furnish four classes of diseases: deformities, lesions (here in the original sense of the Latin *Læsio*, the injury), cutaneous diseases proper and symptomatic diseases.

To briefly sum up, we find that Philippon criticizes the dermatology of the present day for still paying too much attention to the surface appearance of the diseased skin, particularly to the so-called elementary lesions, without allowing due weight to the anatomical process which produces them, for describing the diseased skin in terms entirely at variance with the common rules and customs of general pathology, for making the morphologic features the foundation of the diagnosis without giving proper attention to their anatomical character and to general symptoms, and for setting up an unscientific standard for the definition of single diseases. To improve the state of dermatology he proposes the creation or rather elimination of a general pathology of the skin in conformity with the general pathology of the human body, and of general diagnosis founded on pathological anatomy; he demands that the examination and description of the morbid conditions should be made with the sole view of discovering the anatomical

process and its genesis, that under all circumstances an anatomical diagnosis should first be made and that the diagnosis of a disease itself should not be insisted on, unless all conditions for the construction of a clinical entity should be fulfilled. This I do not understand to mean that we should have to go through all the formalities in every case of an acknowledged disease we meet, and should not profit by our clinical experience, making a snap diagnosis in our practice after having made the anatomical diagnosis in a sufficient number of similar observations. But in cases which are not immediately classified, the procedure should be as demanded by Philippon and should be adhered to in teaching under any circumstances.

In trying to judge of a plan for reform, it seems to me there are always three questions which offer themselves for consideration: 1. Is there anything to reform? 2. Is the proposed plan practicable? and 3. Will its execution really reform?

The answer to these questions in regard to Philippon's writings I should have preferred to leave entirely to the members of this Association, particularly to those who as teachers are more competent and in a better position to judge than I am myself. But as I have promised a critical review, I cannot entirely shirk that duty. Personally I am convinced that Philippon's criticism is indeed in a large measure justified. If I had not had a feeling of dissatisfaction with the state of dermatology before the study of this article I should not have taken the interest in it which I almost unwillingly did, but during its study I found much detail which I am sorry I could not lay before you, particularly in citations from other authors, that clearly shows how prejudice and too devoted adhesion to traditional doctrines pervert honest studies. I believe, however, that what Philippon calls the anatomical-genetic tendency is much more deeply rooted and more widely developed than he makes us believe, particularly among the younger workers, but that it does not avow itself with sufficient energy, partly on account of a reverential reluctance to break with old traditions, partly on account of a conscientious consciousness that it is not yet in the position to satisfy all reasonable demands that could be made upon it. This is particularly true of the microscopical work to which the time and labor of dermatologists has been so much devoted.

In answering the second question, whether the reform or new departure demanded by Philippon is feasible, I do not hesitate to say that I do not only consider it practicable, but almost the only natural way as soon as we try to think and work scientifically, and that I have no doubt, that sooner or later such a plan will be generally accepted, though it may take time, perhaps a generation or more, before this will

be accomplished. Besides the standpoint assumed by Philippson is by no means an entirely new or startling one. To mention only the names of Simon and Unna as the foremost promoters of the histopathology of the skin, none more than Auspitz has represented the anatomical-genetic tendency in his *System der Hautkrankheiten* and particularly in Ziemssen's book on the diseases of the skin. Other authors of books, American and foreign, have started in a similar vein, but finally they cannot extricate themselves entirely from the influence of the elementary lesions. But more than that, I dare say, that every one of us has already followed Philippson's plan, consciously or unconsciously, in the study of skin diseases. It is by no means claimed that the reform Philippson offers is complete or perfect; to the contrary, he is fully aware that a great deal of work has still to be done before the desired improvement in dermatology can be accomplished. But if the greater part of the work that is now scattered and squandered on useless, misdirected investigations could be united and concentrated under one common plan, the results would be much more rapid and satisfactory. That we shall experience a good deal of awkwardness and difficulty in first trying to adhere to Philippson's methods, there is no doubt, but I am also confident that after a few trials we shall find it much easier to do so and gather sufficient recompense for our work. For I am convinced, to answer the third question, that the realization of Philippson's plans would work a real reform of dermatology, that our description would be freed of a great deal of the confusion, of the *embarras de richesse* in regard to terms and names, that it would be brought into closer relations with general pathology and general clinical medicine and would lose a great deal of the difficulties that now surround its study and its general understanding.

THE CLINICAL ASPECT AND TREATMENT OF SOME AFFECTIONS OF THE FINGER NAILS.*

BY FRED. J. LEVISEUR, M.D.,
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IF the statement of some American and foreign authors be true that it is quite impossible to differentiate clinically between eczema, lichen, psoriasis on the one side, and onychomycosis trichophytina on the other, but that the diagnosis simply rests upon the finding of the trichophyton fungus, this interesting affection of the nail will continue to occupy an anomalous and subordinate position in the great system of cutaneous diseases. Owing to the rarity of the disease, we are much in want of accurate description of typical cases enabling us to recognize the affection by some characteristic feature and assign to the microscope, as in most other diseases, the rôle of furnishing corroborative evidence. The disease usually begins with a yellowish discoloration of the nail-plate. The affected portion of the nail loses its luster and becomes opaque and thickened. If it starts from the free border hyperkeratosis of the bed of the nail soon appears, forcing the nail-plate upwards—and often producing an onychogryphosis of mild degree. This moulage shows the thumb nail of the left hand of a girl thirteen years old. There existed no other evidence of the disease elsewhere on the body of the child or in her family. The affection was of one year's duration. The girl often played with a cat which, as the mother reported, was suffering from a peculiar skin eruption. The cat finally fell sick and died in the house. After a long search the fungus was found in the scrapings taken from the diseased nail and soaked in a 10 per cent. solution of caustic potash. Unfortunately I had no opportunity to make a culture or inoculate animals, and therefore am unable to say if the fungus was the trichopyton megalosporon ectothrix, which one would expect to find in such a case.

As a rule the disease is not given the chance to spread in an undisturbed manner, as happened in this case. Accidentally or by intervention the affected part of the nail-plate, or at least its upper layers, are removed and a hard, inelastic, ragged mass remains, which is of a dirty brown, sometimes almost black, color. In this condition it is much

* Read at the 26th Annual Meeting of the American Dermatological Association.

more difficult to recognize the disease clinically, but somewhat easier, I think, to find the fungus. There is no pain present nor any (marked) tendency to suppuration. Meissner and Heller have described cases in which the affection was primary, and Johnston has reported four cases in which there were no other lesions present. Grindon says that heteroinfection from men is uncommon, but that its occurrence as a family disease has been noted several times. The well known fact that a comparatively large number of cases quoted in literature concern old men has been explained on the ground that senile changes of the nail render it particularly liable to infection. This may be so; but want of occupation making the washing of the hands not so much a necessity may have something to do with it, or perhaps more so the fact that old men are much inclined to befriend dogs and cats. Domestic animals, I think, constitute very often the source of infection, and it would be well to bear this in mind every time when inquiring into the history of a case of ringworm of the nail.

In regard to the therapy of the disease I can offer no new suggestions. Nor has it been my good fortune to follow up a case to a perfect cure.

I should like to call your attention to an affection of the nails which is probably of parasitic origin, though not due to any well known vegetable parasites. I have only seen it in adults, where it is found usually in combination with seborrhoic eczema and pruritis ani or scroti. It attacks the nail-plate primarily, starting from the region of the lunula, and very quickly spreads all over the nail. The individual lesions are minute, round, shallow holes of the size of a very small pin-head, arranged sometimes in regular concentric lines. The entire surface of the nail-plate is covered with them. When the disease starts on its way to recovery the lesions slowly disappear, beginning at the proximal end. The nail is not shed, but the clearing-up keeps pace with its physiological regeneration. The affection somewhat resembles that described by Hebra. Lailler and Schütz (*état pointillé des ongles*, thimble-nail) which was found to be a characteristic and early symptom of psoriasis. But it never begins, like the latter, with bright red points, hyperemic in character, on and around the lunula. The individual lesions are of much smaller size. Furthermore, I have never seen it together with psoriasis elsewhere on the body.

Of nine cases which I have collected so far, three were physicians, one a lawyer, one a waiter, two women occupied with ordinary housework, and two business men. The men's attention in every instance was called to their diseased nails by the absence of the natural gloss of the nail-plate, giving it a disagreeable, dirty appearance. Five cases

had a seborrhoic eczema, some on the scalp, some on the body, or both. In one male case there was present a seborrhoic eczema of the scalp and body, and pruritis ani. The women, who were dispensary patients, hardly knew of the presence of this affection. One woman had a general pruritus; the other was to all appearances free from any skin affection.

As a rule a number of fingers are attacked. In one case it was only the thumb of one hand. The disease has no tendency to appear symmetrical. Frequent manicuring or vigorous therapeutical measures aggravate the condition and often obscure its true character by producing an eczema of the surrounding skin. If an alkaline solution is applied to the diseased nails they are liable to assume a dirty brown color. This is particularly the case after an application of liquor carbonis detergens, the discoloration remaining for a surprisingly long time.

As stated above, a microscopical search for vegetable parasites was futile.

In regard to treatment, I have found that salves do not make any impression upon the disease. In four cases a cure was effected by the use of a 1 per cent. solution of permanganate of potash. The fingers were bathed for about ten minutes twice a day, and the discoloration due to the permanganate then removed by a second bath consisting of an oxalic acid slution (2 per cent.).

Though the material which has come under my observation is as yet too small to venture a positive statement, I am inclined to think that the disease has a certain connection with Unna's seborrhoic eczema, or the parasitic eczema of American writers, but no relation whatsoever with ringworm or psoriasis. It also differs clinically from ordinary eczema. Perhaps some of the gentlemen present, whose material is far larger than mine, have come across this affection, only classifying differently.

The occasional combination of pathological changes of the nails and pompholyx (Cheiropompholyx) seems to have escaped the attention of authors who have written about this disease. The latter deserves an independent position in the system of skin diseases, not on account of histological peculiarities, but of its well defined clinical features. In many cases with severe attacks occurring at short intervals, the matrix of the nails is affected. Consequently a new nail is formed, pushing the old one forward very much in the manner of an ordinary infectious onychia. This moulage shows the condition of the nail as the result of a previous attack, while on the side of the fingers lesions due to a new attack may be noticed.

The ordinary eczema localized on and around the nails, of which you see an illustration in this moulage, can be recognized easily, and only in exceptional cases is it necessary to make the diagnosis *per exclusionem*. There is, as a rule, a history of chemical irritation, and in many cases it is quite difficult to draw the border-line between this affection and onychia of a very mild degree. Here it must be constantly borne in mind that the changes of the nail-plate depend largely upon the amount of interference with the matrix. This ground has been thoroughly covered by the paper read by Dr. Politzer of New York, at the last meeting, and I shall only relate a case occurring in my practice.

Mrs. S., sixty-seven years old, had had eczema of several nails on each hand for two years. Suddenly an onychia developed on one of the diseased nails and was followed shortly afterwards by an erysipelatous rash spreading over both hands, arms and feet. The temperature was 101° at night for a few days only, when it became normal. There was present great general weakness, probably due to the sleeplessness caused by continual severe itching and burning. Finally, blebs of the size of a quarter began to form, containing turbid fluid. They were opened and a wet dressing with liquor Burowi, 5 per cent. applied to the affected parts. After the condition had somewhat improved, the fingers, the hands, arms and feet were bandaged with strips covered with a 10 per cent. salicylic soap plaster, devised by Prof. Pick and modified and introduced into this country by Dr. Klotz, of New York. Under this treatment the patient recovered inside of six weeks. Three nails on one hand and two on the other were shed.

During the attack the two daughters of the patient, while nursing their mother, developed at various times an ordinary infectious onychia. This small family epidemic reminds one of the general epidemics reported by Eddy as occurring among young sailors in 1834 and 35, and similar outbreaks existing in England, Scotland, France, Italy, the United States, the Antilles, and the Cape of Good Hope, from 1847 to 1854 (Heller.). The case also may serve as an illustration of the possibility of the development of a serious streptococcic infection of the skin from a chronic eczema of the nails by the transitory stage of an onychia or peronychia.

Of the nail affections due to occupations requiring the handling of chemicals I shall only mention those attacking workmen engaged in the manufacture of Paris green, and fur-dyers. The chemicals containing a large percentage of arsenic produce deep ulcerations, particularly in the region of the lunula, but also of the nail-bed on the sides of the free edges. They have a dry, almost black, mummified basis and cause very little pain. If left alone they show no tendency to suppuration or

granulation and are liable to end in extensive mutilations of the phalanges. Packing these ulcerations with moist iodoform gauze acts almost as a specific, and a foreman of a factory of Paris green who, together with several workmen, was under my treatment for this affection of the nails, reported that since the precaution was taken to bandage every suspicious sore of the fingers with iodoform gauze, no new cases occurred. Workmen engaged in the dyeing of furs in this country frequently suffer from an affection of the finger ends and nails which is characterized by large, flat wart-like excrescences of the skin around the nail and a great amount of subungual hyperkeratosis. These black, hard, irregular masses sometimes become fissured and then extremely painful, incapacitating the men from work for a considerable time. The nail itself is blackened, much increased in thickness, almost as hard and smooth as glass, and unless trimmed continually will develop a marked onychogryphosis. The so-called imitation seal-skin dye seems to be particularly liable to produce the disease. Pyrogalllic acid, aniline black, and peroxide of hydrogen are combined in many of the dye-stuffs used, and it is difficult to tell which of these substances must be held responsible. I believe that the pyrogalllic acid produces the injury, and that the other substances only serve to intensify its irritative action. Individual susceptibility certainly counts for a great deal and I have had some patients who had to give up their occupations of dyers on account of the impossibility of avoiding this painful affection.

Aside from the injurious action of chemicals, the nails are also affected mechanically during the pursuit of various occupations. I have here a moulage of the hand of a newspaper boy whose main work consists in sorting the daily papers. The somewhat sharp edges of the paper cut right under the nails, wearing away the nail-plates almost down to the lunula, similar to *morsura unguium*. Both hands are equally affected. Another case here shows a hypertrophy of the nail in a cigarmaker. While at work stretching the tobacco leaves he uses his nails exactly like an instrument, and in the center of the free edge, extending backward, a large spine-like, horny processus has formed which supports the nail in a curious manner, making it especially useful for his occupation.

Compared with ringworm of the nail *favus* is by no means as rare and much easier to diagnose. This is mainly due to the fact that *favus* of the scalp is most frequently found simultaneously, or at least the characteristic traces left behind by the ravages of the *acchorion* are still present. In the accompanying photograph the hand of the patient

was placed on the head, thus showing the affected finger as well as the slightly depressed bald spots on the scalp due to favus.

The most marked clinical symptom of the disease, when attacking the nails, is, I believe, the formation of hollow spaces more or less filled with detritus starting from the free edge of the nail towards the lunula.

FIG. 1.

Nail of little finger undermined by disease, surface having retained normal smoothness. Bald spots of scalp, the result of favus.

The surface of the nail-plate itself is left intact, the mycelium growing best on a soil which is little exposed to air or the changes of temperature. This moulage illustrates the condition very well. In such cases the diagnosis favus can be readily made without the aid of the microscope. The boy who suffered from the affection had however a very extensive favus of the scalp. The moment when the disease reaches the re-

gion of the matrix an active inflammatory process begins, as is seen in the moulage. This leads ultimately to the elimination of the nail, and probably is nature's way of curing the disease. The nail-bed, after removal of the horny shell, shows an irregular lamellated surface with shallow depressions here and there. The latter are favorite places for the accumulation of the fungus and really the nearest approach to the formation of scutula which I have ever seen. Sections of the two nail-plates of another case of which I take the liberty of showing you a moulage, were examined after avulsion very carefully by a well-known microscopist and found to be perfectly free

FIG. 2.

Little finger of same patient five weeks after avulsion of nail, showing growth of new and healthy nail

from the fungus, while the latter was found in scrapings taken from underneath the edges of the plate. In this case, which concerned a nurse 21 years old, born in Ireland, there was also present large bald areas on the scalp, the unmistakable remnants of an old favus. The patient stated that the affection of the scalp dated back six years, while that of the index and third finger of the left hand was of four and three months' duration respectively. She was put under ether and after disinfecting the finger thoroughly with soap, alcohol and a bichloride solution, both nails were extracted by means of Post's nail forceps. The avulsion of the nails was accomplished without difficulty. After the operation the fingers were covered with a little iodoform gauze and

protected by a cap formed of small bands of adhesive plaster which finally were painted over on the extensor surface with flexible collodion. This dressing was removed after two days and from that time on renewed daily after bathing the finger in sublimate solution. When the new nail began to show itself the bathing was stopped and the nail bed in front of the new nail painted daily with a 1-per-cent. solution of sublimate in tincture of benzoin.

In a case published by me in 1898 the same treatment was resorted to, only with this difference that the hollow spaces were plugged with cotton and the nail-plate allowed to grow undisturbed. After five weeks the latter could be extracted with great ease under local anesthesia with ethyl chloride.

Avulsion of the nails is, I believe, indicated in all cases where the disease has made considerable inroad. For milder cases a cure may be effected by Dr. Johnston's remedy, a saturated solution of potassium iodide and metallic iodine. It is hardly necessary to warn against the application of strong caustics, as for instance, caustic potash, or the use of the sharp spoon, because it is well known that the destruction of even a very slight part of the matrix will invariably result in the formation of a disfigured or distorted nail. Injury to the nail-bed, provided it be moderate, is not so important for the welfare of the nail. Small, deep, linear cuts or contusions of the nail-bed make more trouble than large, flat superficial injuries.

The very curious disease called koilonychia (spoon-nail) is probably due to pathological changes of the nail-bed. In a case of mine of which this is a moulage, there is present, as in all similar cases of mild degree, a transverse elevation in the centre of the nail, dividing the latter in two excavated parts, the distal one being more spoon-like in appearance. In koilonychia totalis the transverse ridge is absent. In this case there is very little if any subungual hyperkeratosis near the free edge of the affected nail. The wall near the lunula is somewhat retracted and slightly inflamed. The patient, a servant girl, is unable to give an account of the development of the condition. She says her finger was a little sore eight months ago but never caused her any inconvenience since. The rest of her nails are normal.

In conclusion I would like to show you the moulages of two hands representing a case of onychorrhexis, the disease which was described particularly well by Dubreuilh and Frèche. Heller considers it to be a variety of onychatrophy. In my case not alone the smallness of the nails but of the entire end-phalanges must attract attention. The hands are those of a girl eleven years old whose nails have been bad, according to the mother's statement, since infancy. The thumbs show only

small stripes on both sides as the remnants of the nail-plate, the greater part of which is transformed into a smooth pergameneous covering. Only the nail of the third finger on both hands and the fourth finger of the left hand, are normal as regards the surface; the other nails are fissured longitudinally. There is no history of syphilis or rachitis, but the child, in body as well as mind, is poorly developed for her years. A sister, two years older, had perfectly normal nails.

It is as yet uncertain if the affection can be called a disease or simply represents a symptom due to trophic changes of the nerves.

A FURTHER REPORT ON NÆVO-CARCINOMA.

By A. RAVOGLI,
Cincinnati.

TWO more cases of nævo-carcinoma which I had occasion to study this year have given me the opportunity to submit again this important subject to your consideration. This time, also, one of the sufferers from the affection is a lady about forty years old, and the other a gentleman fifty-one years old. The first died last year with cancerous cachexia, showing carcinomatous reproductions in the liver, pancreas, kidneys, etc.

When I saw the lady she had a large patch made up of innumerable cancerous nodules from the size of a split pea to that of a hazelnut, some of a glistening bright red color, others already ulcerated, others vegetating, covering nearly the whole lumbo-sacral region. The whole mass and the surrounding skin was colored dark red, tender and swollen on account of having been exposed to the X-rays, which had started a dermatitis. The lady said that she had found great relief in her sufferings from the use of the fluorescent light. From the extension and quality of the growths, from her general condition, from her statement, taken all together, I did not find it necessary to make any change, and I encouraged her to continue in her treatment. A few weeks later I received an invitation to see the post-mortem.

I must tender my thanks to Dr. Morrell, who was kind enough to let me have specimens of the cutaneous growths and of the different viscera affected.

The lady had had since her birth a non-pigmented nævus on the lumbo-sacral region, which had never caused her any trouble until

in late years it began to grow, showing a vegetating tendency, and gradually began to grow and in a short time became ulcerated.

In the case of the gentleman the nævus is situated on the left hypochondrium, and is of a deeply pigmented kind. It was originally of the size of a quarter of a dollar. It had never given him any trouble, with the exception that when carrying in his upper vest pocket some instruments needed in his business, these rubbed on the nævus sometimes causing irritation. He was often annoyed by some itching sensation on the growth, which compelled him unconsciously to rub it, and a moisture began to ooze out which stained his underwear. Gradually the nævus increased in size, and when I saw him it was much larger than a silver dollar, round in shape, dark brown red in color, irregularly vegetating, discharging a large quantity of serum of a nauseous odor.

In the case which I had the honor to present to the meeting in Washington, which was published in the JOURNAL under the title of Multiple Nodular Melanocarcinoma of the Skin from a Nævus,¹ the tumor was seated on the sternal region and began to trouble the lady only when she was pregnant and the steel springs of the corset were constantly irritating it thus causing an itching sensation and oozing of serum.

In that case the microscopic examination revealed a large quantity of pigment in the stratum lucidum and in the stratum spinosum. An infiltration of large epithelioid cells tainted with dark brown pigment was found in an alveolar structure in the papillary layer, all giving the characteristic appearance of the superficial epithelioma. In the present case the tumor did not belong to the pigmented class, it was simply a nevus verrucosus which was changed into a papillomatous growth.

The specimens taken from the nevus showed the horny layer of the epidermis missing, but the surface is covered with enormous masses of epithelial layers, which have their origin from the stratum spinosum. It is made up of large, nucleated epidermic cells, which remain soft, unable to form a healthy cuticle. The epithelial cells greatly enlarged make a sharp line at the edge of the elongated and enlarged papillæ, where they show some pigment granules. The interpapillary spaces are filled up with an enormous quantity of epidermic cells. The line of demarcation, however, at the papillary layer is still the boundary between the epidermis and the connective tissues, and no epidermic elongations from the epidermic strata are found to enter the cancerous stroma.

The papillæ are greatly elongated and in some places show true

papillary vegetations, since from one papilla two or three are sprouting. They are not free from cancerous infiltration as infiltrating cells are crowding in their stroma. The same infiltration is found in the sub-papillary layer, which gives to the tissue the appearance of an homogeneous mass. In the middle of this mass the capillary blood vessels are abundant and the infiltrating cells are much more crowded in their vicinity. Lymph spaces are well maintained, but in some of these spaces, newly developing carcinomatous nodules are found. The infiltration of the carcinoma is so thick and thoroughly spread that it is scarcely possible to recognize the glands and the hair follicles of the skin. It is easy to recognize that the whole mass is made up of

FIG. 1.

small, distinct, connective tissue alveoli, containing a limited number of epithelioid cells. The alveolar distribution gives to the specimen an aspect of variegated marble.

Another specimen taken from a secondary nodule, shows the epidermis normal, the papillæ free from any infiltration, the blood vessels enlarged and congested, some exudation cells can be found between the connective tissues. A mass of carcinomatous infiltration shows in the subpapillary layer of the corion, filling up all of the lymphatic spaces and those between the connective tissue fibers, reaching the subcutaneous tissue. In some places between the infiltrating cells, nests of epithelioid cells form round nodules like plexiform carcinoma, as remarked by Max Joseph in his case. (Fig. 2.) In all our specimens we find that the epithelium forming the carcinomatous

nodules shows no connection with the epidermic cells of the strata of the epidermis. They follow the lymph spaces of the corium. In one specimen initial carcinomatous nodules can be seen in the division of a ramification of a lymphatic space, following three branches. The cancerous epithelioid cells are in the middle surrounded by small leucocytes. The alveolus is round and is encircled by connective-tissue fibers in the form of a nest. The surrounding connective-tissue fibers show plainly their corpuscles, which are increased in size as is found in the embryonic tissues.

The elastic fibers are normal in the whole specimen, except around the infiltration where they are seen to be somewhat thinner. Plasma

FIG. 2.

cells are constantly found. Some of the glands of the skin are also taken into the carcinomatous infiltration, but they are not primarily involved as we have found in other cases of the ordinary skin cancer. The disposition of the infiltration shows the characteristics of a deep nodular carcinoma, although it has started from a non-pigmented nævus. The epidermic layers take no part in the formation of the carcinoma, as we have found in other cases, where the epithelial cells of the stratum spinosum were mixed with the tissues of the derma. On studying the specimens under a larger power, $\frac{1}{8}$, the carcinomatous changes are more visible. The mass shows a large quantity of round, oval, cubic epithelioid cells, containing large nuclei in a row of two or three together. Between the cells can be seen some fine fibrin threads. The large cells contain a clear and homogeneous protoplasm, which is only

lightly stained by the different coloring fluids, in some others the protoplasm has a granular appearance. The cells in the alveoli are so crowded that only a few show a round shape, most of them being oval, cubic, or elongated from the pressure.

The nuclei of the cells show the most interesting features, some are thick and marked by a marked contour with granular contents and a small nucleolus. These, on account of their resemblance to parasitic elements, have been referred to the blastomycetes. In some places the nuclei have attained a large size in comparison to the cells, they have a granular substance, and show some appendages or elongations starting from their body.

FIG. 3.

In many places are to be seen free small organized bodies round or oval in shape, with a darker line in the middle. They readily absorb the stain, and are thus made perceptible with Bismarck brown. Following these bodies in the specimen it seems that in a successive evolution they have appendages or elongations with which they become organized as part of the tissues. Fig. 3 shows very clearly colonies of these bodies in different stages of development.

Fig. 4 shows a pearl with a mother cell in the middle, surrounded by connective-tissue fibers, with many of these small bodies between the tissues, and others already older in the process of organization.

Fig. 5 shows some large peculiar round cells, grouped together in the number of three or four and greatly swollen. They are filled with a quantity of small round bodies, which strongly refract the light.

It seems that the immense quantity of these small bodies causes the swelling of the cells, which are converted into so many nests. These bodies when seen under a certain degree of refraction give the idea of being spores vegetating inside of the cells. These mother cells are imbedded in nests of collagenous tissues, which are greatly swollen and enlarged. Granules or small bodies resembling those contained in the cells are found in some places between the connective tissues scattered as foreign bodies, and they give the impression of having left the mother cells.

In another specimen some peculiar cells have the appearance of having burst and look empty, showing ragged edges. With-

FIG. 4.

out stretching the imagination too much it seems to me that the spores are developed and hatched in the interior of the cells, which are swollen and enlarged. The mechanical irritation and the toxic elements produced by the developing organisms, are to be accounted for by the changes which occur in the connective-tissue fibers and in the lymph spaces. The spores when ripe come out of the mother cell and remain free in the middle of the tissues. They find their way in the lymph spaces and so extend the area of infection or by the lymphatic vessels are carried to the lymphatic glands, where they remain without any opposition. On account of negative chemiotaxis, the leucocytes are powerless against these virulent elements, and the small leucocytes furnish a nourishing culture medium for their development.

The foregoing conclusions are only based on microscopic examina-

granulation and are liable to end in extensive mutilations of the phalanges. Packing these ulcerations with moist iodoform gauze acts almost as a specific, and a foreman of a factory of Paris green who, together with several workmen, was under my treatment for this affection of the nails, reported that since the precaution was taken to bandage every suspicious sore of the fingers with iodoform gauze, no new cases occurred. Workmen engaged in the dyeing of furs in this country frequently suffer from an affection of the finger ends and nails which is characterized by large, flat wart-like excrescences of the skin around the nail and a great amount of subungual hyperkeratosis. These black, hard, irregular masses sometimes become fissured and then extremely painful, incapacitating the men from work for a considerable time. The nail itself is blackened, much increased in thickness, almost as hard and smooth as glass, and unless trimmed continually will develop a marked onychogryphosis. The so-called imitation seal-skin dye seems to be particularly liable to produce the disease. Pyrogalllic acid, aniline black, and peroxide of hydrogen are combined in many of the dye-stuffs used, and it is difficult to tell which of these substances must be held responsible. I believe that the pyrogalllic acid produces the injury, and that the other substances only serve to intensify its irritative action. Individual susceptibility certainly counts for a great deal and I have had some patients who had to give up their occupations of dyers on account of the impossibility of avoiding this painful affection.

Aside from the injurious action of chemicals, the nails are also affected mechanically during the pursuit of various occupations. I have here a moulage of the hand of a newspaper boy whose main work consists in sorting the daily papers. The somewhat sharp edges of the paper cut right under the nails, wearing away the nail-plates almost down to the lunula, similar to *morsura unguium*. Both hands are equally affected. Another case here shows a hypertrophy of the nail in a cigarmaker. While at work stretching the tobacco leaves he uses his nails exactly like an instrument, and in the center of the free edge, extending backward, a large spine-like, horny process has formed which supports the nail in a curious manner, making it especially useful for his occupation.

Compared with ringworm of the nail *favus* is by no means as rare and much easier to diagnose. This is mainly due to the fact that *favus* of the scalp is most frequently found simultaneously, or at least the characteristic traces left behind by the ravages of the *acchorion* are still present. In the accompanying photograph the hand of the patient

was placed on the head, thus showing the affected finger as well as the slightly depressed bald spots on the scalp due to favus.

The most marked clinical symptom of the disease, when attacking the nails, is, I believe, the formation of hollow spaces more or less filled with detritus starting from the free edge of the nail towards the lunula.

FIG. 1.

Nail of little finger undermined by disease, surface having retained normal smoothness. Bald spots of scalp, the result of favus.

The surface of the nail-plate itself is left intact, the mycelium growing best on a soil which is little exposed to air or the changes of temperature. This moulage illustrates the condition very well. In such cases the diagnosis favus can be readily made without the aid of the microscope. The boy who suffered from the affection had however a very extensive favus of the scalp. The moment when the disease reaches the re-

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opinion that the cause of carcinoma penis is found in the irritation produced by the uncleanness, resulting from phymosis.

The digestive tract from the lips to the rectum is subject to cancer, so much so that von Leyden¹⁸ reported that seventy per cent. of all cases of cancer in Germany were found in the digestive organs.

It will be of no advantage to my argument to proceed in the study of the statistics, which have been given by Behla¹⁹ and lately by Karl Kolb²⁰, with admirable patience and accuracy. It appears that carcinoma more frequently affects those organs which are most exposed to irritation, to abrasions and consequently to the entrance of infectious germs.

In the cases of carcinoma starting from a nævus, it is clearly seen that continuous irritation and often repeated abrasions act on the soft and protuberant mass of the nevus. Nævi seated in places where they are protected from injury are not affected by carcinoma, but on the contrary nævi in regions exposed to irritations are often changed into carcinoma. Just lately I saw in my private practice an extended ulceration affecting the whole surface of a vascular nævus of the internal region of the thigh, in a baby four months old. The ulcerative condition was produced by the presence of urine, perspiration, etc., remaining on the tender surface of the nævus.

In conclusion, I would say that carcinoma frequently affects nævi not on account of the cells remaining in the structure of the nævus from the embryonic stage, but on account of the frequent bruises and irritation to which they are exposed, and their soft stroma, which easily reacts to irritation.

The name of nævo-carcinoma has for me only the meaning of a *carcinoma on a nævus*, but does not have any particular interest in reference to the origin of these growths. The pigment is only a coincidence in the nævus, and in consequence it is found in the carcinomatous stroma as such and it does not produce nor increase the malignancy of the carcinoma.

Carcinoma from the nævus has the same origin from infectious germs as the other carcinomata, and like any other carcinoma is capable of producing general carcinomatous infection with a fatal end.

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Book Reviews.

The Medical Treatment of Gall Stones. By J. H. KEAY, A.M., M.D. 1902: P. Blakiston's Son & Co.

The title of the above volume is misleading. The book is a monograph on gall-stones. The chapter on treatment occupies only thirty of one hundred and twenty-six pages. The title-page gives no evidence of the author's connection with a hospital or other institution which would afford him special opportunity for investigating the subject of gall-stones, and there is no preface. In the introduction, however, we find the author's excuse for writing the volume: he himself has suffered from biliary colic.

He states that "it is no easy matter reading, sifting and analyzing all that has been written on gall-stones, and setting down the conclusions one has formed in simple and succinct form." Yet the chance gathering under his roof of a relative, a patient, and himself, all sufferers from gall-stones, induced him to undertake the task. The result is a verbose tangle of fact and fancy and illogical conclusions.

After stating that the bile is of high specific gravity and that the daily output contains from one-quarter to one-half ounce of solid material, he complacently says, "we can readily understand that, where there is any obstruction to the

flow the liquid material may pass the obstruction, while the other ingredients remain behind and form concretions and stones." And he repeats the statement on the same page. We have not specially selected this sentence: it has been taken at random, and typifies the conclusions drawn.

The volume has an attractive cover, but the paper leaves much to be desired. According to the legend, the presswork was done in England.

Treatise on Diseases of the Skin. HENRY W. STELWAGON. Philadelphia: W. B. Saunders & Co., 1902.

There is always room at the top, they say and for a good book on library shelves. This one, the reviewer has pleasure in saying, is worthy a place with the best in English and they are as good as any. That this may not be considered indiscriminate and unthinking praise, it may be said that the writer still holds the opinion that "Cutaneous Medicine" so far as it goes, is peerless in any tongue, a view which Dr. Stelwagon would probably approve. There is evidence that the minutest care has been lavished on the work; it is almost painful when it comes to placing credit for investigation where it belongs. There are numerous references in footnotes by which the reader may pursue a given subject further than the author has seen fit to carry it. Selection of such references is no small undertaking as any one knows who has attempted to sift the trashy literature that has cursed this specialty. The illustrations are good, both clinical and microscopic, and plentiful. The colored plates, introduced from Mracek's Atlas, might have been dispensed with without loss. Unless they are as fine as in "*La Pratique Dermatologique*," they are likely to mislead the uninitiate and these are not new. The work is not for students for which let us be grateful, although it is dedicated to them in some sort, to "advanced" students. A man needs some knowledge of medicine to peruse these pages with profit.

Among General Considerations, the striking point and the one which established an instant bias in the reviewer's mind is the triumphant struggle to escape the temptation to arrange the subjects alphabetically. What excuse there is for taking a disease out of its context when Hebra's classification is extant, has never appeared to the unaided eye. The liberties taken are justifiable, with the exception of erythema induratum and lichen scrofulosorum. The negative evidence against their tuberculous character is not such as to permit their inclusion among the erythemas; their course is ground sufficient for divorce. Erythema multiforme is held to be, like urticaria, a toxic angioneurosis of various origin, bacterial, alimentary. There seems to be a general settling down at last to fairly uniform views everywhere on the question of exfoliative dermatitis in all its phases.

No ghost need come from the grave to say that the same is not true of the lichens, lichen ruber and pityriasis rubra pilaris. Stelwagon clearly distinguishes them and in doing so, confers a favor, in giving a literal translation of Hebra's classic description of the former. He errs in one particular. The pityriasis does show confluent patches, not infrequently enough to constitute a differential point.

Our ancient enemy, psoriasis, comes in for a long essay, in which there is a flaw to be picked, pathology. It is impossible for any inflammatory disease to begin in the epidermis which is non-vascular. There is nothing here to indicate that the same changes are present as in eczema, differing only in degree. It would be well for all pathologists to accept Unna's description of the process. It is mentioned under eczema, but his terms are not fully explained. If that

were done with eczema, the variations need only be noticed under psoriasis and seborrheic eczema, identical pathologically also. The treatment of the subject of eczema is mainly along Dühring's lines. Zoster is described as "usually a descending neuritis." In view of that summary of conclusions, it seems strange for no more than a mention to be made of Head's great work. Would it not be better to separate entirely septic pemphigus comprising pemphigus acutus, contagiosus and neonatorum, from the ordinary variety with a different, if unknown etiology? When the author prepares a new edition, it might be well to refer to the nail changes, in the bullous affections.

The best section in the book (in the writer's opinion, of course), is that devoted, under hypertrophies, to the keratoses. There is no such illuminating discussion of ichthyosis in the literature. Edema neonatorum is as well placed in this section as anywhere perhaps, but it looks strayed. There are some minor points that might be made, but it would be carping criticism to notice them when the excellence is so general.

The discussion of new growths is not satisfactory. It never is, not even when Virchow has done it. In the first place, the granulomas deserve a place to themselves. Syphilis, tuberculosis, lepra and the rest are so nearly identical processes that they ought not to be separated and certainly ought not to be sandwiched between two epithelial tumors. If granuloma fungoides is a granuloma, as the author believes, it should go with the others. Its present place would seem to indicate a relationship to sarcoma. Every one knows there is no such thing as a tumor classification worthy the name, but admiration always attends a brave effort. There are various minor points which deserve attention. There is no evidence as Unna and others have pointed out of any connection between the dermatitis and the duct carcinoma of Paget's disease. What relation they bear to each other is still puzzling investigators. As to xanthoma of diabetics, some of us are sure of the inflammation present; we are not advancing a tentative proposition as the author represents.

On p. 998, there is the inevitable oversight, granuloma *necrotica*. Where on earth did that hybrid originate? On the next page, the reviewer is represented as believing that hidradenitis suppurativa is a paratuberculosis. His statement in his original paper was that there is often a connection since more than half of the cases occur in the tuberculous. It is probably best for the present to separate, as is done here, this disease and acne varioliformis, although there is no anatomic basis for it.

Real admiration is deserved for the judicial attitude Dr. Stelwagon preserves throughout toward Sabouraud's work on alopecia areata, ringworm and the impetigos. He is not carried away by it but weighing it carefully, accepts it with reserve and only so far as it is corroborated. There is an appendix in which diseases of the buccal mucous membrane are considered.

The book is good reading throughout. It is no fit food for babes, but Dr. Stelwagon's colleagues will welcome it as altogether worthy of its author.

JAS. C. JOHNSTON.

Photographic Atlas of Diseases of the Skin. GEORGE HENRY FOX, M.D. Philadelphia: J. B. Lippincott & Co., 1902. Parts VIII. to XVI. inclusive.

This is the conclusion of Dr. Fox's work. There are almost no failures in these eighty plates with over a hundred illustrations. They are as we have said before really good enough for that long suffering gentleman, the general practi-

tioner with longings and no experience in dermatology, to make something of. What he will do probably, will be to fit his cases to the pictures, not the pictures to the cases, and so fail of the goal to which the publishers invite him, "the reputation and remuneration frequently diverted to the specialist." There is a good deal of repetition, three plates of pityriasis versicolor, seven of psoriasis and five of lichen ruber. Presumably the last are introduced in support of the author's valiant defense of the identity of lichen ruber and pityriasis rubra pilaris, a subject which must be of the very remotest interest to the aforesaid G. P.

The text sometimes reminds one of certain "heart to heart talks by the pastor of his flock." For instance, the author says acute eczema would be treated with more success by zinc oxid ointment than by most of the strenuous efforts in vogue, but that he rarely uses it himself. It is an honest confession not unexpected that his patients get a few more aids to recovery than hygiene, diet and exercise. There is a tale (far be it from us to assert its authenticity) that he once recommended this line to a "professor" of athletics. The advice is as sound as experience can make it in most instances.

There is one thought to which this Atlas gives substantial support. It is that we have far surpassed not only in actual clinical photography, but in the reproduction of the photographs, the dermatological ancients of twenty years ago.

Compend of General Pathology. ALFRED EDWARD THAYER, M.D. Philadelphia: P. Blakiston's Son & Co., 1902.

This volume is number 15 in the list of the publishers' Quiz Compends and is to be followed by a companion volume on special subjects. If the student of pathology were not the ungrateful wretch he usually is, he would thank fortune that his labors were lightened to the extent they are here by condensation and a generally successful selection of salient matter. There is careful avoidance of controversial points so far as that can be done in any work on pathology. The style is clear and forceful; there is no mistaking the teacher's habit of thought here. As a rule, books for students are ground out by people who have little knowledge of and less sympathy with their needs. This is a fair measure of praise when one considers how difficult it is to condense pathological literature and not lead the reader astray.

A striking feature of the work is the attention paid to the gross aspects of pathological conditions, often neglected wholly in much larger text books than this. Full consideration is given to autopsy and laboratory methods including bacteriological. There is even a table of weights and measures and of statistics of use in the autopsy room.

It is a curious thing that teachers will cling to that worse than bad habit of defining processes and diseases. No man can define either if he knows anything about it, so why expect it of a student when in time he must unlearn them all? There is one other general criticism to be made as to choice in the admission of matter. For instance, pigments are discussed which are not to be found in some of the most comprehensive text-books, and cell morphology is neglected both in tumors and in inflammation as it very commonly is for dry-as-dust discussions of mitosis. The reviewer has yet to see in any work an adequate discussion of the morphology of fixed cells in inflammatory processes. Exuded elements are described at length; the fibroblast and its derivatives barely mentioned. They not only ought to be described but there should be a colored plate

The epithelial cells entering into the structure of the carcinoma are identical with those of the different organs but lying in the connective tissues. In the same way the granules of pigment which are found in the tissues of the derma from the nævus are considered also capable of promoting the production of the carcinoma. In my first and third cases of carcinoma from pigmented moles, a large quantity of pigment granules and of pigment cells was found in the carcinomatous infiltration, but the accidental introduction of pigment granules into discolored cells has not much pathological significance. There has generally been attributed to pigmented carcinomata a much higher degree of malignancy, so that they have been called melanomata. The idea of so deleterious an action from the presence of the pigment will be easily dispelled by the consideration of the production of the pigment. The pigment is the result of a metamorphosis of the hemoglobin from the red corpuscles of the blood, which are changed into pigment granules. In a melanoma the presence of the pigment will indicate an effusion of blood in the structure of the carcinoma, which on account of the changes of the red substance of the blood has been converted into pigment.

So far in the pre-existing tissues we have not found any reason for malignancy. From connective tissues, in consequence of the proliferation, will result connective tissues in the form of an organized tumor. The studies of the proliferation and of the morphologic changes of the cells of the carcinoma as bipolar mitosis indicative of malignancy, karyokinesis, nuclear segmentation, cytodiaresis prove that carcinoma cells multiply by irregular and atypical karyokinesis, but they do not give any idea of the origin of carcinoma. In fact there must be some unknown reason, some *Deus ex machina*, which causes the dormant cells to be waked up to life and produce malignant tumor. Although Unna⁴ thinks that the origin of the nævo-carcinomata supports the Cohnheim theory, and that the anomaly of the growth in carcinomatous structure can be imagined as the result of a diminished resistance of the mesoderma, yet he says that the general deleterious action of these tumors is still incomprehensible without the admission of strong elements from the outside, which are nothing else than parasitic elements.

Trauma and irritation in reference to the formation of cancer has always attracted the attention of the pathologists, and we can say that it is the general belief that malignant growths frequently do follow local injuries and local irritations. This finds a support from the analogy to infectious granulomata, especially tubercular and syphilitic lesions which are produced in the tissues and in the organs exposed to trauma or irritation. A serious injury of the tissues usually provokes a strong and a genuine reaction, while a continuous irritation is capable

tion, and lack any support from the bacteriological standpoint. But carcinoma is not the only disease where bacteriology has not yet succeeded in demonstrating the germ growing in the culture media.

Several kinds of giant cells have been often encountered in the various species of carcinoma, which have been interpreted as the result of degenerated epithelial cells in the rôle of foreign bodies.

Buxton² concurs in this opinion, and he believes that the most probable origin of the giant cells of carcinoma is the presence of epithelial pearls in the middle of the myeloid cells, and that they are made up by the fusion of the protoplasm of several cells together in a hyaline degeneration.

FIG. 5.

Growth of peculiar cells in a nest of collagenous tissue.

Fordyce³ stated that in epithelioma the origin of all giant cells cannot be explained by the presence of foreign bodies or by the fusion of adjacent cells. He has seen, described and photographed nuclei, contained in hyaline cells of a uniform size and appearance, which he says are like cell infiltration in the surrounding connective tissues, and *are probably lymphoid cells* which have invaded the hyaline masses. In other portions of the same tumor epithelial cells in various stages of degeneration are seen to be invaded by nuclei of similar size and appearance.

The opinion that there is a possible formation of new tissue, or at least of new cells, in the tumors, from the pre-existence of an organoplastic matter is untenable. In place of new formation, proliferation has been substituted, and new cells and new tissues find their origin in the pre-existing cells and tissues, entirely removing the old idea of a *generatio equivoca*.

The epithelial cells entering into the structure of the carcinoma are identical with those of the different organs but lying in the connective tissues. In the same way the granules of pigment which are found in the tissues of the derma from the nævus are considered also capable of promoting the production of the carcinoma. In my first and third cases of carcinoma from pigmented moles, a large quantity of pigment granules and of pigment cells was found in the carcinomatous infiltration, but the accidental introduction of pigment granules into discolored cells has not much pathological significance. There has generally been attributed to pigmented carcinomata a much higher degree of malignancy, so that they have been called melanomata. The idea of so deleterious an action from the presence of the pigment will be easily dispelled by the consideration of the production of the pigment. The pigment is the result of a metamorphosis of the hemoglobin from the red corpuscles of the blood, which are changed into pigment granules. In a melanoma the presence of the pigment will indicate an effusion of blood in the structure of the carcinoma, which on account of the changes of the red substance of the blood has been converted into pigment.

So far in the pre-existing tissues we have not found any reason for malignancy. From connective tissues, in consequence of the proliferation, will result connective tissues in the form of an organized tumor. The studies of the proliferation and of the morphologic changes of the cells of the carcinoma as bipolar mitosis indicative of malignancy, karyokinesis, nuclear segmentation, cytodiaresis prove that carcinoma cells multiply by irregular and atypical karyokinesis, but they do not give any idea of the origin of carcinoma. In fact there must be some unknown reason, some *Deus ex machina*, which causes the dormant cells to be waked up to life and produce malignant tumor. Although Unna⁴ thinks that the origin of the nævo-carcinomata supports the Cohnheim theory, and that the anomaly of the growth in carcinomatous structure can be imagined as the result of a diminished resistance of the mesoderma, yet he says that the general deleterious action of these tumors is still incomprehensible without the admission of strong elements from the outside, which are nothing else than parasitic elements.

Trauma and irritation in reference to the formation of cancer has always attracted the attention of the pathologists, and we can say that it is the general belief that malignant growths frequently do follow local injuries and local irritations. This finds a support from the analogy to infectious granulomata, especially tubercular and syphilitic lesions which are produced in the tissues and in the organs exposed to trauma or irritation. A serious injury of the tissues usually provokes a strong and a genuine reaction, while a continuous irritation is capable

of bringing about only an incomplete reaction which acts strongly on the nutrition of the tissues, making them parts of lessened resistance. The nutrition, as Virchow stated, is a property of the tissues and each tissue has the so-called *vita propria*. In the living organism we can have cells which are dead and the disease be nothing more than the result of the death of cells as happens in the different degenerations. Parenchymatous inflammations may result from the process of irritation as passive alterations of the nutrition of the tissues. It is not rare for foreign bodies to enter into the organism, and to remain there without taking part in the life phenomena and without destroying the life of the person. Bullets continue imbedded in the tissues, coloring substances introduced for tattooing remain in the skin as dead substances. This, however, cannot be said of those elements which, entering the organism of man and of animals, continue their life as parasites. They live at the expense of the organism, into which they have entered, and for a long time remain and develop without producing apparent disorders. In carcinoma we see that for some time it may remain local without causing any bad influence on the life of the person, but the time comes when it will show its effects on the general system. In the carcinomatous cell we recognize the parasitic symbiosis, a mechanical irritation at first, and the secretion of poisonous toxins afterwards. It remains imbedded in the tissues as a germ, which gradually germinates and proliferates, and then spreads and finds new places and produces systemic alterations. We see before us as factors of the carcinoma two principal points, one a wound, an abrasion, the other an infection. In our cases of nævus the constant rubbing of garments and of instruments on a thin surface, elevated on the surface of the normal skin, was sufficient by friction to injure the tissues and produce a contusion and an abrasion.

Considering the ubiquitousness of infectious agents, an injury in the continuity of the epidermis, an excoriation, or an abrasion of the mucous membrane will clearly show the relation of the cancer to trauma. The epidermis and the epithelium are sure protective organs against the entrance of infectious germs, and nothing but an abrasion will permit the entrance of infection.

The arguments in favor of the parasitic origin of the cancer are every day increasing, and the cancerous protozoa of Scheurlen, Darier, Russell, Soudakewitch, Ruffer and Walker will soon find such proof in the researches of Romali, Sanfelice, Plimmer, Busse and Gilchrist. Some of the peculiar forms of the cells of the cancerous growths to which I have called your attention have already been studied and described by those of the first group as parasites, by others as products of

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cell degeneration. These products of degeneration are not found in any other granuloma or tumor; they are characteristic and nobody has ever succeeded in their reproduction. Roswell Park⁶ with his indefatigable work, in his established authority, asserts that in his laboratory similar appearances have been reproduced in many cases, after inoculation with cancerous material. Not all infectious diseases are produced from bacteria, but there are many classes of other possible parasites which are not yet exactly known. The history of the plasmodium of malaria has thrown light on this subject. The observations and experiments of Roswell Park are of some support to my observation that the organisms grow in the cell. In fact, in order to obtain success in the culture of these cancerous organisms he has closed them in a collodion capsule and so has dropped it into the peritoneal cavity of animals, subjects of experiments. In this way Roswell Park has obtained the growth of these organisms, which when reinoculated into other animals have caused hematogenous infection with nodular formation corresponding to an acute carcinosis.

Now returning to the soft nævi, they have been pointed out by many authors as the starting point of carcinoma, and Lancereaux and Paget have described cases of epithelial melanotic carcinoma arising from pre-existing nævi. Unna⁷ indicts the pigmented cells of the soft nævi as a contributing cause in the spreading of the epithelial elements in the connective tissues. Max Joseph⁸ follows the ideas of Ribbert, that pigment cells "chromatophores" are the cause of the production of carcinoma from a nævus, and that these cells through some elongations go between the epithelial cells, starting the carcinoma, and the pigment which they produce staining the cells imparts the malignant properties to the tumor. Unna⁹, Bauer¹⁰ and Kolaczek¹¹ have all seen epithelial cells reach the connective tissues of the superficial derma, where they insert themselves. In consequence a series of alterations occur, the epithelial cells dispose themselves in a row and with the irritation they produce cause the connective tissues to close around them, forming in this way the aveoli. On account of a consequent stasis, an edematous condition takes place which increases the nutrition of the epithelial cells, which proliferate in the connective tissues, giving origin to the cancerous foci. Unna, however, adds that the followers of the parasitic theory find that from the entrance of elements from outside result the changes of the tissues in carcinoma, because nævi always become affected in consequence of a trauma. Löwenthal¹² in a series of 800 cases of malignant tumors, among them 119 cases of carcinoma of the skin and of the mucous membranes, could trace in nearly all an injury of more or less importance preceding the appearance of the malignant

growth. M. B. Hartzell refers to two cases of epithelioma, one on the nose and another on the lower lip, in which a wound had been responsible for the production of the carcinoma.

When an abrasion is present infection easily follows. In this respect carcinoma resembles other infectious processes of which the microbic origin has been demonstrated. It happened in the case of tuberculosis that its infectiousness was firmly believed in long before the bacillus had been discovered.

Carcinoma is an infectious disease of a slow, chronic type; from a small insignificant ulcer it spreads by continuity and by contiguity through the lymphatic system, affects internal organs by metastasis, and produces profound alterations of an infectious nature in the general system. In the case of the lady under consideration there is seen a soft, non-pigmented nevus changed into a carcinomatous ulcer, which in less than three years has caused general cancerous infection and death.

Such profound alterations show beyond any doubt the presence of infective elements, which are responsible for the production and the spreading of the carcinoma. It would be too difficult a task even to mention the authors who have studied the parasitic origin of the cancer, beginning with Nedopil, Dariér and Wickham, Klebs, Ohlmer and Korotneff. It would be too long even to mention the studies of the more recent investigators, such as Plimmer and Roncali, Sanfelice, Foa, Vedeler, Sternberg and Roswell Park. Thoma described coccidia in the nuclei of carcinoma, followed by Dariér, Albarran and Sjöbring. Pfeiffer described anebsa sporidium followed by Adamkiewicz, Kahave and Nepvean. Blastomycetes were described as fuchsinophile bodies by Russell, as canceromyceta by Niesen, as saccharomyces niger by Mafucci, and as blastomycetes by Sanfelice and Roncali.

Blastomycetes have recently been described by Gilchrist and Busse, and then confirmed by Hyde, Montgomery and others, as the micro-organisms which cause a peculiar infectious and malignant dermatitis, which they have called blastomycosis.

Returning to our subject of carcinoma we find that many experiments have been made in reference to the inoculability of these malignant affections. Positive results have been obtained in mice, rats, dogs and cats by inoculating carcinoma from man into animals, and from animal to animal, as in the experiments of Pfeiffer, Moran and Goujon. Autoinoculations of carcinoma in inoperable cases have been carried out successfully by Han and Cornil and N. Senn⁴, who in four experiments has obtained in three the reproduction of carcinoma. H. R. Gaylord¹⁸ has given one of the most interesting and scientific reports of his studies

on the parasitic origin of carcinoma, carried on in the New York State Pathological Laboratory. The factor of carcinoma, according to Gaylord, is a protozoon, which he has constantly found in all cases of carcinoma under his examination. He finds the parasite of a different size and appearance according to the age. He has reproduced the disease in various animals by different methods of inoculation, one of which has already been referred to above.

With all these convincing arguments, the origin of carcinoma has not yet been cleared up. A large number of distinguished researchers, such as Fabre, Domergue, Gratia and Lenaux, Kurscherf and Bartsch, Sternberg, McFarland, Duplay, Cazin, Steinhaus, Pianese, Schwartz, E. H. Nichols, Adami, Senn, etc., are still opposing the observations and the results obtained by the others.

From the related observations and experiments it seems to me that carcinoma will be proved to be a parasitic disease. From the pre-existing cells through proliferation we have tumors, but none of malignant nature. Malignancy is the result of infection, infection which comes from outside or from germs which remained dormant in the system, as in hereditary syphilis. From the specimens of carcinoma which I have submitted to your consideration I have pointed out a particular histopathological form of cells, which assume enormous proportions on account of elements which have the appearance of spores developing themselves in their body. I have shown some of these enormously swollen cells broken and small bodies scattered in the middle of the connective tissues. These bodies, it seems to me, are those described as coccidia or sporozoa, which having small appendages attach themselves to the tissues and reproduce the same cells. With the presence of these organisms by the mechanical irritation of the tissues, the enormous proliferation of the connective tissues and the destruction of the elastic fibers are explained. From the biological functions of these organisms a sphere of local infection is easily demonstrated, and the general infection from there is easily explained.

If an argument from analogy with plants could explain my idea, I would select the case of the ergoted maize, where the spores of the claviceps purpurea develop themselves in the soft grains, swelling them to enormous proportions. That the infectiousness of carcinoma comes from outside is easily demonstrated from the frequency of the skin cancer. The parts most often affected are the face and the hands, parts which are most subject to wounds and to excoriations. I had lately under treatment in my hospital practice three cases of cancer of the penis, which had found their origin in the phymotic condition of the prepuce. Holländer¹⁶ and Henry H. Horton¹⁷ concur in the same

numbers which are out of print cannot be obtained for love or money from those who have them. That we have presented the very best work of American dermatologists and a share of the genito-urinary in that time, there is no reason to doubt. Space limitations have prevented adequate reviews of foreign literature, but little of real importance has failed to appear. The truth is that a good deal of trash appears in our special journals as elsewhere. We have increased the size of the volumes, illustrated them more profusely in half-tone because a good black and white print presents disease more clearly a good deal than the poor lithographs which generally reward illustrating effort in this country. We have succeeded in putting the Journal in the last three years on a paying basis, a condition which had never existed previously.

Lastly, we offer our best thanks to the men who have helped us in every possible way that loyalty could suggest. There are some hundreds of them and it has been quite worth while if the Journal from 1897 to 1903 has won their approval.

JAS. C. JOHNSTON,
GEO. K. SWINBURNE.

ANNOUNCEMENT FOR 1903.

BEGINNING with the new year this Journal will be continued under the editorial management of Dr. James C. White and Dr. John T. Bowen of Boston, Dr. James Nevins Hyde of Chicago, Dr. Henry W. Stelwagon of Philadelphia, Dr. Prince A. Morrow, Dr. Edward B. Bronson, Dr. George T. Jackson and Dr. John A. Fordyce of New York.

Dr. A. D. Mewborn of New York will be the acting editor. The editors will take an active interest in the Journal and by their united efforts hope materially to improve the quality of its contents.

It is their desire to present a monthly review of all important advances in dermatology and syphilis both in this country and abroad.

This Journal has furthermore been made the official organ of the American Dermatological Association and will publish in addition to its transactions the proceedings of all the local societies throughout the country devoted to this specialty.

In the future all communications relating to the editorial department should be addressed to Dr. A. D. Mewborn, 224 West 52d street, New York.

The Journal will be published by The Grafton Press, 70 Fifth avenue, New York, where all inquiries relating to subscriptions, advertisements, etc., should be directed.

Original Communications.

EPIDERMOLYSIS BULLOSA HEREDITARIA.

Report of a Case Presenting Unusual Features.

BY GROVER WILLIAM WENDE, M.D.,
Clinical Professor of Dermatology, University of Buffalo.

SUMMARY OF CHIEF POINTS. The evidence of the hereditary or congenital formation of vesicles and blebs at points subject to traumatism and irritation; the marked infiltration of the skin after the lesions subside; the arrangement of the bullæ in concentric patches; the decided changes in the nails; the lack of hirsute growth upon the scalp and the absence of eyebrows and eyelashes; the general tenuity of the skin.

J. T., seven years old; born in Canada; first examined, September 23, 1901. **FAMILY HISTORY:** The patient's father and mother are cousins, both being healthy. The grandparents are still alive and quite robust. There is no history of syphilis, neurosis or skin disease of any kind affecting any remote member of the family. There were four children in all; of these a brother, younger than the patient, died at the age of two months from acute bowel trouble. The third child appeared healthy at birth and remained so for almost a year, when a skin eruption showed itself about the mouth and anus, which finally spread to other parts of the body. The eruption gradually became more aggravated, with intervals of comparative relief. Under its influence the child continued to grow weaker; when at the age of two it died without other apparent cause. The fourth child was seemingly hale and vigorous.

PERSONAL HISTORY: The patient at birth seemed perfectly well and so continued for three weeks, when he had an attack of diarrhœa, simultaneously with which the skin began to redden about the anus and mouth, both becoming at first moist and afterwards scaly. The precise nature of this affection was difficult to determine. It continued, with variations in extent and form, until the patient had reached the age of three years, when he had an attack of cholera morbus, during the continuance of which there was a brief and complete remission of the skin manifestation. When it reappeared, the development of blisters was first noticed about the fingers, within the palms and

FIG. 1.

upon the back of the hands. Similar lesions were developed upon the soles of the feet, specially involving the heels. There was a recurrence of the blebs about the hands and elsewhere. This state of affairs persisted until the commencement of the hot months, when

nodules shows no connection with the epidermic cells of the strata of the epidermis. They follow the lymph spaces of the corium. In one specimen initial carcinomatous nodules can be seen in the division of a ramification of a lymphatic space, following three branches. The cancerous epithelioid cells are in the middle surrounded by small leucocytes. The alveolus is round and is encircled by connective-tissue fibers in the form of a nest. The surrounding connective-tissue fibers show plainly their corpuscles, which are increased in size as is found in the embryonic tissues.

The elastic fibers are normal in the whole specimen, except around the infiltration where they are seen to be somewhat thinner. Plasma

FIG. 2.

cells are constantly found. Some of the glands of the skin are also taken into the carcinomatous infiltration, but they are not primarily involved as we have found in other cases of the ordinary skin cancer. The disposition of the infiltration shows the characteristics of a deep nodular carcinoma, although it has started from a non-pigmented nævus. The epidermic layers take no part in the formation of the carcinoma, as we have found in other cases, where the epithelial cells of the stratum spinosum were mixed with the tissues of the derma. On studying the specimens under a larger power, $\frac{1}{8}$, the carcinomatous changes are more visible. The mass shows a large quantity of round, oval, cubic epithelioid cells, containing large nuclei in a row of two or three together. Between the cells can be seen some fine fibrin threads. The large cells contain a clear and homogeneous protoplasm, which is only

papillary vegetations, since from one papilla two or three are sprouting. They are not free from cancerous infiltration as infiltrating cells are crowding in their stroma. The same infiltration is found in the sub-papillary layer, which gives to the tissue the appearance of an homogeneous mass. In the middle of this mass the capillary blood vessels are abundant and the infiltrating cells are much more crowded in their vicinity. Lymph spaces are well maintained, but in some of these spaces, newly developing carcinomatous nodules are found. The infiltration of the carcinoma is so thick and thoroughly spread that it is scarcely possible to recognize the glands and the hair follicles of the skin. It is easy to recognize that the whole mass is made up of

FIG. 1.

small, distinct, connective tissue alveoli, containing a limited number of epithelioid cells. The alveolar distribution gives to the specimen an aspect of variegated marble.

Another specimen taken from a secondary nodule, shows the epidermis normal, the papillæ free from any infiltration, the blood vessels enlarged and congested, some exudation cells can be found between the connective tissues. A mass of carcinomatous infiltration shows in the subpapillary layer of the corion, filling up all of the lymphatic spaces and those between the connective tissue fibers, reaching the subcutaneous tissue. In some places between the infiltrating cells, nests of epithelioid cells form round nodules like plexiform carcinoma, as remarked by Max Joseph in his case. (Fig. 2.) In all our specimens we find that the epithelium forming the carcinomatous

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lightly stained by the different coloring fluids, in some others the protoplasm has a granular appearance. The cells in the alveoli are so crowded that only a few show a round shape, most of them being oval, cubic, or elongated from the pressure.

The nuclei of the cells show the most interesting features, some are thick and marked by a marked contour with granular contents and a small nucleolus. These, on account of their resemblance to parasitic elements, have been referred to the blastomycetes. In some places the nuclei have attained a large size in comparison to the cells, they have a granular substance, and show some appendages or elongations starting from their body.

FIG. 3.

In many places are to be seen free small organized bodies round or oval in shape, with a darker line in the middle. They readily absorb the stain, and are thus made perceptible with Bismarck brown. Following these bodies in the specimen it seems that in a successive evolution they have appendages or elongations with which they become organized as part of the tissues. Fig. 3 shows very clearly colonies of these bodies in different stages of development.

Fig. 4 shows a pearl with a mother cell in the middle, surrounded by connective-tissue fibers, with many of these small bodies between the tissues, and others already older in the process of organization.

Fig. 5 shows some large peculiar round cells, grouped together in the number of three or four and greatly swollen. They are filled with a quantity of small round bodies, which strongly refract the light.

It seems that the immense quantity of these small bodies causes the swelling of the cells, which are converted into so many nests. These bodies when seen under a certain degree of refraction give the idea of being spores vegetating inside of the cells. These mother cells are imbedded in nests of collagenous tissues, which are greatly swollen and enlarged. Granules or small bodies resembling those contained in the cells are found in some places between the connective tissues scattered as foreign bodies, and they give the impression of having left the mother cells.

In another specimen some peculiar cells have the appearance of having burst and look empty, showing ragged edges. With-

FIG. 4.

out stretching the imagination too much it seems to me that the spores are developed and hatched in the interior of the cells, which are swollen and enlarged. The mechanical irritation and the toxic elements produced by the developing organisms, are to be accounted for by the changes which occur in the connective-tissue fibers and in the lymph spaces. The spores when ripe come out of the mother cell and remain free in the middle of the tissues. They find their way in the lymph spaces and so extend the area of infection or by the lymphatic vessels are carried to the lymphatic glands, where they remain without any opposition. On account of negative chemiotaxis, the leucocytes are powerless against these virulent elements, and the small leucocytes furnish a nourishing culture medium for their development.

The foregoing conclusions are only based on microscopic examina-

tion, and lack any support from the bacteriological standpoint. But carcinoma is not the only disease where bacteriology has not yet succeeded in demonstrating the germ growing in the culture media.

Several kinds of giant cells have been often encountered in the various species of carcinoma, which have been interpreted as the result of degenerated epithelial cells in the rôle of foreign bodies.

Buxton² concurs in this opinion, and he believes that the most probable origin of the giant cells of carcinoma is the presence of epithelial pearls in the middle of the myeloid cells, and that they are made up by the fusion of the protoplasm of several cells together in a hyaline degeneration.

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The opinion that there is a possible formation of new tissue, or at least of new cells, in the tumors, from the pre-existence of an organoplastic matter is untenable. In place of new formation, proliferation has been substituted, and new cells and new tissues find their origin in the pre-existing cells and tissues, entirely removing the old idea of a *generatio equivoca*.

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So far in the pre-existing tissues we have not found any reason for malignancy. From connective tissues, in consequence of the proliferation, will result connective tissues in the form of an organized tumor. The studies of the proliferation and of the morphologic changes of the cells of the carcinoma as bipolar mitosis indicative of malignancy, karyokinesis, nuclear segmentation, cytodiaresis prove that carcinoma cells multiply by irregular and atypical karyokinesis, but they do not give any idea of the origin of carcinoma. In fact there must be some unknown reason, some *Deus ex machina*, which causes the dormant cells to be waked up to life and produce malignant tumor. Although Unna⁴ thinks that the origin of the nævo-carcinomata supports the Cohnheim theory, and that the anomaly of the growth in carcinomatous structure can be imagined as the result of a diminished resistance of the mesoderma, yet he says that the general deleterious action of these tumors is still incomprehensible without the admission of strong elements from the outside, which are nothing else than parasitic elements.

Trauma and irritation in reference to the formation of cancer has always attracted the attention of the pathologists, and we can say that it is the general belief that malignant growths frequently do follow local injuries and local irritations. This finds a support from the analogy to infectious granulomata, especially tubercular and syphilitic lesions which are produced in the tissues and in the organs exposed to trauma or irritation. A serious injury of the tissues usually provokes a strong and a genuine reaction, while a continuous irritation is capable

of bringing about only an incomplete reaction which acts strongly on the nutrition of the tissues, making them parts of lessened resistance. The nutrition, as Virchow stated, is a property of the tissues and each tissue has the so-called *vita propria*. In the living organism we can have cells which are dead and the disease be nothing more than the result of the death of cells as happens in the different degenerations. Parenchymatous inflammations may result from the process of irritation as passive alterations of the nutrition of the tissues. It is not rare for foreign bodies to enter into the organism, and to remain there without taking part in the life phenomena and without destroying the life of the person. Bullets continue imbedded in the tissues, coloring substances introduced for tattooing remain in the skin as dead substances. This, however, cannot be said of those elements which, entering the organism of man and of animals, continue their life as parasites. They live at the expense of the organism, into which they have entered, and for a long time remain and develop without producing apparent disorders. In carcinoma we see that for some time it may remain local without causing any bad influence on the life of the person, but the time comes when it will show its effects on the general system. In the carcinomatous cell we recognize the parasitic symbiosis, a mechanical irritation at first, and the secretion of poisonous toxins afterwards. It remains imbedded in the tissues as a germ, which gradually germinates and proliferates, and then spreads and finds new places and produces systemic alterations. We see before us as factors of the carcinoma two principal points, one a wound, an abrasion, the other an infection. In our cases of *nævus* the constant rubbing of garments and of instruments on a thin surface, elevated on the surface of the normal skin, was sufficient by friction to injure the tissues and produce a contusion and an abrasion.

Considering the ubiquitousness of infectious agents, an injury in the continuity of the epidermis, an excoriation, or an abrasion of the mucous membrane will clearly show the relation of the cancer to trauma. The epidermis and the epithelium are sure protective organs against the entrance of infectious germs, and nothing but an abrasion will permit the entrance of infection.

The arguments in favor of the parasitic origin of the cancer are every day increasing, and the cancerous protozoa of Scheurlen, Darier, Russell, Soudakewitch, Ruffer and Walker will soon find such proof in the researches of Romali, Sanfelice, Plimmer, Busse and Gilchrist. Some of the peculiar forms of the cells of the cancerous growths to which I have called your attention have already been studied and described by those of the first group as parasites, by others as products of

cell degeneration. These products of degeneration are not found in any other granuloma or tumor; they are characteristic and nobody has ever succeeded in their reproduction. Roswell Park⁶ with his indefatigable work, in his established authority, asserts that in his laboratory similar appearances have been reproduced in many cases, after inoculation with cancerous material. Not all infectious diseases are produced from bacteria, but there are many classes of other possible parasites which are not yet exactly known. The history of the plasmodium of malaria has thrown light on this subject. The observations and experiments of Roswell Park are of some support to my observation that the organisms grow in the cell. In fact, in order to obtain success in the culture of these cancerous organisms he has closed them in a collodion capsule and so has dropped it into the peritoneal cavity of animals, subjects of experiments. In this way Roswell Park has obtained the growth of these organisms, which when reinoculated into other animals have caused hematogenous infection with nodular formation corresponding to an acute carcinosis.

Now returning to the soft nævi, they have been pointed out by many authors as the starting point of carcinoma, and Lancereaux and Paget have described cases of epithelial melanotic carcinoma arising from pre-existing nævi. Unna⁷ indicts the pigmented cells of the soft nævi as a contributing cause in the spreading of the epithelial elements in the connective tissues. Max Joseph⁸ follows the ideas of Ribbert, that pigment cells "chromatophores" are the cause of the production of carcinoma from a nævus, and that these cells through some elongations go between the epithelial cells, starting the carcinoma, and the pigment which they produce staining the cells imparts the malignant properties to the tumor. Unna⁹, Bauer¹⁰ and Kolaczek¹¹ have all seen epithelial cells reach the connective tissues of the superficial derma, where they insert themselves. In consequence a series of alterations occur, the epithelial cells dispose themselves in a row and with the irritation they produce cause the connective tissues to close around them, forming in this way the aveoli. On account of a consequent stasis, an edematous condition takes place which increases the nutrition of the epithelial cells, which proliferate in the connective tissues, giving origin to the cancerous foci. Unna, however, adds that the followers of the parasitic theory find that from the entrance of elements from outside result the changes of the tissues in carcinoma, because nævi always become affected in consequence of a trauma. Löwenthal¹² in a series of 800 cases of malignant tumors, among them 119 cases of carcinoma of the skin and of the mucous membranes, could trace in nearly all an injury of more or less importance preceding the appearance of the malignant

FOUR FORMS OF GENERALIZED EXFOLIATIVE DERMATITIS (ERYTHRODERMIES EXFOLIANTES, GENERALISEES, BESNIER).

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Boston.

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AS it has been my lot during the last few years to meet with an unusual number of cases of generalized exfoliative dermatitis, I have thought it worth while to describe four cases, illustrating different types of this obscure condition. It seems to me, in fault of all etiological aid, that there are sufficient points of dissimilarity to keep these forms clearly separated for the present. It certainly will not aid us in our endeavor to increase our knowledge, to consider them all as pityriasis rubra, without right of subdivision, as do the English, for there can be little or no doubt that different etiological agents are at work in these various forms.

Case I.—In December, 1900, I was consulted by a woman of twenty-seven, a resident and native of New Brunswick, who was then suffering from a third attack of general exfoliative dermatitis. I had considerable correspondence with her family physician, and from him learned that her first attack had come on five years previously, in November, after a period of anemia and neurasthenia that had lasted about a year. It had a sudden onset, beginning with distinct chills, nausea and vomiting, with a temperature for nearly three weeks of 101° - 104° . It began upon the face as an intense erythema, accompanied by much edema, extending rapidly over the entire body, and on the fifth day exfoliation in large masses began, and continued at its maximum for three weeks, all the nails and hair being lost. The process then began to diminish slowly, and at the end of five months the skin had become nearly normal. It had not, however, regained its former texture, as there was a persistent roughness and dryness left. After this first attack there were several very slight and localized attacks of erythema, but nothing especially pronounced until the summer of 1900, five months before I saw her, when, without warning or known cause, there had been an almost exact repetition of the symptoms of five years previously, beginning as before, with chills, nausea and vomit-

on the parasitic origin of carcinoma, carried on in the New York State Pathological Laboratory. The factor of carcinoma, according to Gaylord, is a protozoon, which he has constantly found in all cases of carcinoma under his examination. He finds the parasite of a different size and appearance according to the age. He has reproduced the disease in various animals by different methods of inoculation, one of which has already been referred to above.

With all these convincing arguments, the origin of carcinoma has not yet been cleared up. A large number of distinguished researchers, such as Fabre, Domergue, Gratia and Lenaux, Kurscherf and Bartsch, Sternberg, McFarland, Duplay, Cazin, Steinhaus, Pianese, Schwartz, E. H. Nichols, Adami, Senn, etc., are still opposing the observations and the results obtained by the others.

From the related observations and experiments it seems to me that carcinoma will be proved to be a parasitic disease. From the pre-existing cells through proliferation we have tumors, but none of malignant nature. Malignancy is the result of infection, infection which comes from outside or from germs which remained dormant in the system, as in hereditary syphilis. From the specimens of carcinoma which I have submitted to your consideration I have pointed out a particular histopathological form of cells, which assume enormous proportions on account of elements which have the appearance of spores developing themselves in their body. I have shown some of these enormously swollen cells broken and small bodies scattered in the middle of the connective tissues. These bodies, it seems to me, are those described as coccidia or sporozoa, which having small appendages attach themselves to the tissues and reproduce the same cells. With the presence of these organisms by the mechanical irritation of the tissues, the enormous proliferation of the connective tissues and the destruction of the elastic fibers are explained. From the biological functions of these organisms a sphere of local infection is easily demonstrated, and the general infection from there is easily explained.

If an argument from analogy with plants could explain my idea, I would select the case of the ergoted maize, where the spores of the claviceps purpurea develop themselves in the soft grains, swelling them to enormous proportions. That the infectiousness of carcinoma comes from outside is easily demonstrated from the frequency of the skin cancer. The parts most often affected are the face and the hands, parts which are most subject to wounds and to excoriations. I had lately under treatment in my hospital practice three cases of cancer of the penis, which had found their origin in the phymotic condition of the prepuce. Holländer¹⁶ and Henry H. Horton¹⁷ concur in the same

especially by Féréol, Besnier and Brocq. In this case there could be no question of a confusion with scarlatina, except perhaps at the onset of an attack, when I did not see her, but all dermatologists will remember instances where they were much puzzled at first to distinguish this form of dermatitis from scarlet fever. The proof is positive that this form of exfoliative dermatitis may occur from the ingestion of drugs, such as mercury, quinine, etc., and, as is well known, Brocq and others have queried whether all cases may not be due to some such agent. It seems, however, pretty clearly demonstrated that no such association exists in a number of the cases. In the case reported the patient had at the time of the first outbreak been taking pills, the nature of which could not be determined. In succeeding outbreaks all possibility of medication as an etiological factor could be excluded. Besnier's position seems the most reasonable, *viz.*, that in certain predisposed persons many different causes, as medicaments, toxins, local irritants, etc., may determine this manifestation, and that the cause in the various attacks may not always be the same. This position finds its analogy in the well known susceptibility of the skin produced by poisoning with rhus or other cutaneous irritants, so that we may have from other slight causes recurrences of the exact type of the first attack.

We not infrequently see cases of a scarlatiniform erythema, sometimes more or less universal, often circumscribed, following surgical operations, sepsis, drugs or other causes. These are the scarlatinoid type of Besnier. In view of their frequency and that the form under discussion has many features quite distinct from them, it seems to me that this recurrent scarlatiniform eruption is better named generalized recurrent scarlatiniform *dermatitis* following Vidal and Leloir, Mario and Graham, rather than to place it amongst the erythemata. It should, however, be provisionally grouped with the universal desquamative affections, as it may be best studied from that standpoint.

Case II.—The patient was a clergyman, seventy-two years of age, who had always enjoyed good health and who had had no previous skin affection. There was a history of an attack of rheumatism and iritis some years previously. The attack had begun two weeks before I saw him, in December, 1900, on the face and head as a violent erythema with considerable edema, spreading rapidly to the rest of the body, so that at the time of my visit the eruption was absolutely universal, of a very intense red hue, and profusely scaling. The patient was a large, well-nourished, vigorous man. He had taken no medicine of any kind. The temperature was normal, the tongue clear, the urine normal. There was no itching and only moderate discomfort. At the apex there was a slight systolic murmur. On the scalp there was a tumor, somewhat ob-

scured by the scaling, which had been called a wen, and had existed for fifteen years. This tumor was excised later and found to be an epidermoid cancer. The scales were very large in size, separating from the legs in the form of sheets.

Two months later, February, 1901, the report was that the patient was slowly improving. The scales had now become very small and fine, the skin felt softer, and the erythema was not nearly so pronounced. There had lately appeared upon the chest and back, and to a less extent upon the limbs, quite a number of small white spots from the size of a pea to nearly that of a quarter of a dollar. They were not atrophic but stood out very sharply from the surrounding erythema, and were moderately scaling.

The patient's general health continued excellent, and he was soon able to go about and pursue his ordinary mode of life. The scaling and redness diminished very slowly. I saw him just a year after the beginning of the affection. It was found that the "white spots" that have been described had increased very much in size, so that the intervening hyperemic areas now appeared as the prominent spots, and not the white areas. The white areas were not scaling, but were slightly rough, while there was still a slight desquamation on the red spots. There was a slight general thickening of the skin on the face. It seemed evident that the white spots were produced by a disappearance of the hyperemia in those areas, with perhaps also a disappearance of pigment, a leucoderma, and that as the affection progressed toward recovery these areas increased peripherally. These "white spots" always had a convex margin, similar to that of vitiligo.

At the acme of the attack the hair was very much thinned, but was never wholly lost. The nails were lifted from their bed by the accumulation of horny material, but were never wholly lost.

This case belongs in the type of dermatitis exfoliativa Wilson, described by Brocq as "*dermatite exfoliative généralisée*," or "*maladie d'Erasmus Wilson*," although Wilson was not the first to observe the type, but only created the name dermatitis exfoliativa. It is not my purpose to discuss here the different symptoms of this form. In most instances, as is true of all forms of generalized desquamative dermatitis, the diagnosis is only rendered clear by the course and evolution of the cutaneous disturbance. Its claims to be separated from desquamative scarlatiniform erythema are not very imposing, nor can it often be distinguished clinically from the secondary desquamative dermatitis that is illustrated by the next case.

Case III.—The third case is that of a single woman of forty, who had had two previous attacks of intense dermatitis of the face and

hands which were considered to be due to poisoning by ivy, and were of that type. I saw her in September, 1899, when her head, arms, legs, and to some extent the trunk, were the seat of intense dermatitis, with much edema and very great erythema, but with scarcely any exudation. It was thought possible that ivy poisoning may have been responsible for this attack also, as the patient lived in the country and was in the habit of walking in the woods. After a few weeks this case, which began with the appearances of an artificial dermatitis, developed into a generalized exfoliative dermatitis. The patient continued in this state for over a year before there was any sign of improvement. After that there was a very gradual bettering with frequent relapses. When seen two and a half years from the beginning of the attack there was still some slight scaling and infiltration in places. The general health during the attack was never markedly affected, except what resulted from the affection of so large an area of skin. The nails were never lost, but were unevenly formed, opaque and covered with ridges. There were no other symptoms of importance, and never any elevation of temperature.

This case is thus briefly reported, as its type is familiar to all, and as it is of pretty common occurrence. It belongs to the form called by Besnier "erythrodermie exfoliante secondaire, accidentelle," which embraces the cases of generalized exfoliative dermatitis, following or developing from psoriasis, eczema, lichen planus, etc., or caused by the administration of a drug internally, as quinine, belladonna, etc., or by the action of an external agent, such as mercury. Should these so-called secondary exfoliating erythrodermata be accorded a separate place? Crocker declares that he has seen as fatal results from these secondary cases as from the others, and that a milder and shorter course is not a characteristic of them, as Brocq believes. It cannot be doubted that certain cases, as the one just reported, may be prolonged over years. Although I have seen a good many of these cases, I have never known one to have a fatal termination.

Case IV.—The last case is one of pure pityriasis rubra, of the Hebra type. It was described by me in the *St. Paul Medical Journal* in February, 1900.

The patient was an unmarried woman born in America of Irish parents, and twenty-five years old when the affection began. She had had no previous illness of importance, and the family history was negative. She was a strong looking and intelligent woman. When first seen the affection had just made its appearance and was confined to the face, and could not then be differentiated from an erythematous and scaling eczema. The skin was bright red, not infiltrated, and covered

with fine scales. There was no exudation. There was moderate pruritus. Otherwise the patient was perfectly healthy as far as could be determined.

I saw this patient at intervals of one or two weeks during the next few years. Treatment of various kinds seemed to have absolutely no effect on the process, which steadily progressed. Before long the scalp was entirely involved. Patches gradually appeared in the axillæ and on the chest, which increased or coalesced until at the end of a year from the time when she was first attacked, the entire skin was affected. No part ever became normal after it was once involved. There were no symptoms referable to the internal organs, nor any signs upon physical examination.

During the next four years, when I saw her at intervals, there was a slow progression of the disease. After the first year she was confined to the house on account of the difficulty in locomotion. The erythema became more pronounced and there was a very active and constant desquamation, mostly in the form of fine branny scales. There was never, from start to finish, the slightest sign of exudation. The palms and soles were covered with thick keratoses.

Treatment had practically no result. Thyroid extract was given for some time, and finally omitted on account of its depressing effect upon the heart. Arsenic was equally inefficient. Stimulating applications were not well borne, the greatest relief being afforded by those of a soothing nature. Various medicated baths were tried, but did not give especial relief.

Three years after the beginning of the affection, and two years before the patient's death, the hair began to fall from all parts of the body, until during the last months of life there was total alopecia. The nails became thickened and discolored and were finally reduced to brittle, formless stumps, loosely adherent to the nail-bed.

During the last year of the patient's life, there began to be a marked atrophy of the entire integument, with loss of almost all the subcutaneous fat. Three months before her death this atrophy had reached an advanced stage. Hitherto the suffering had not been great, as the internal organs performed their normal functions, and discomfort from the continual scaling and from the atrophy of the skin about the joints was the only thing complained of. Now there occurred occasional attacks of faintness, especially after eating, with flatulency and pain. There was also much restlessness and insomnia. At this time physical examination failed to detect any organic disturbance. The urine was normal. The heart's action was weak, but there was no sign of disease. A month before she died there was a fainting attack lasting

several hours, and after that the scaling, which had been continuous and excessive, suddenly ceased.

During the last month of her life the skin had shrunk so that the body looked about one-half its normal size. There was great ectropion and the lips were shrunk so that the teeth in front were fully exposed. The limbs could not be flexed. There were large bed sores on the back and over the trochanters. There was little or no scaling. The fainting attacks continued and there was much distress after taking simple nourishment. There was no glandular enlargement. Repeated examination failed to detect any internal complication, with the exception of weakness of the heart. She grew weaker rapidly and died of exhaustion, five years after the first appearance of the disease.

With regard to the question of tuberculosis, which has been found to accompany this affection so frequently, there were no signs of it at any time, in the case I am dealing with. It will be remembered that Jadassohn found tubercle bacilli in the glands in two of his cases, in one of which there were no other signs of tuberculosis.

Sellei, in a late communication, reports a case in which no symptoms of tuberculosis were observed, unless possibly a terminal diarrhea could be so regarded. It seems to me that the theory that we have in pityriasis rubra a condition which readily lends itself to inoculation with tuberculosis is far more probable than the assumption that the cutaneous changes are caused by the action of the bacillus, whether directly or indirectly. The rareness of this form may be seen from the fact that Jadassohn was able to collect only sixteen cases, to which he added two from his own observation and one doubtful one. Certainly the typical cases of this variety present sufficient characteristics to warrant their separation from the other types of recurrent scarlatiniform dermatitis or from those exfoliative processes secondary to drugs, or certain other cutaneous affections. The form of dermatitis exfoliativa Wilson would appear to me to have more points of similarity with Hebra's type, although I would by no means group them together. It is difficult to confute those who believe in a benign form of pityriasis rubra Hebrae, and granting that it may exist, it is hard to determine oftentimes where forms of the generalized exfoliative dermatitis of Wilson, with its rapid, acute onset and favorable termination end and pityriasis rubra Hebrae begins.

Clinical Notes.

A CASE OF ZOSTER OF THE ELEVENTH DORSAL ROOT FOLLOWED BY A GENERAL HERPETIC ERUPTION, PART OF WHICH WAS ALSO SEGMENTAL IN DISTRIBUTION.

BY CHARLES J. ALDRICH, M.D.,

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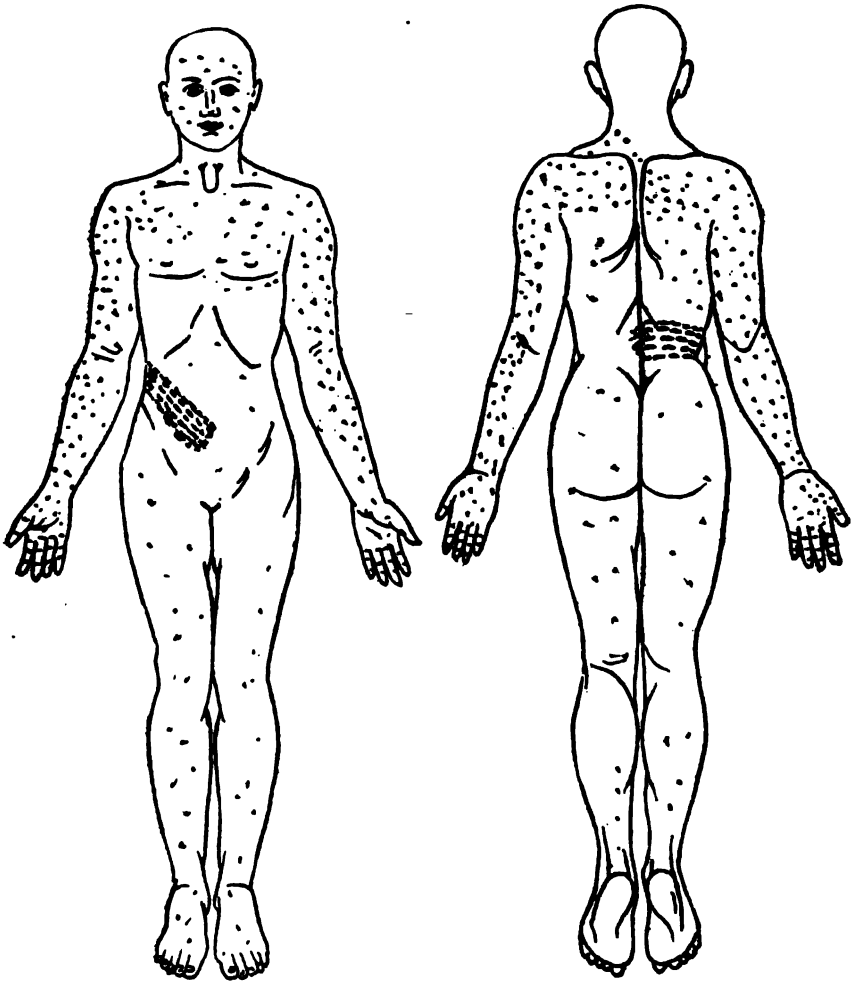
THE report of a typical case of herpes zoster possesses comparatively slight interest since such cases are not particularly uncommon. The violent forms, however, are not frequent but a case of herpes zoster accompanied by a general herpetic eruption is certainly most rare and will afford an apology for the record of the following case.

A. T. W., male, age 33, married, commercial traveler; seen in consultation with Dr. Pipes, of Cleveland, Aug. 18, 1901. He is a large powerful, athletic man, relates a good family history, and previously has never suffered any severe illness except gonorrhea, and a questionable inoculation of syphilis five years ago. He has a deep scar on the leg as a result of a wound received in our late war with Spain.

August 10th, he was in Minnesota and had been fishing and swimming in a lake; soon after this he began to feel a sensation of general malaise, chills, fever and aching pains throughout the body. August 13th, he was attacked with a severe pain in the back and loins in the area of the cutaneous distribution of the eleventh dorsal segment. The pain soon became atrocious and in twenty-four hours a rash appeared in that region. After this the pain seemed better but the rash became very tender to touch. When I was called to see him on August 18th, he was suffering a great deal of pain. The Doctor's diagnosis of herpes zoster was confirmed. It was located over the area shown in the cuts, of a bright pink color, confluent and exquisitely sensitive and painful.

He was taken to the Cleveland General Hospital and about August 20th, developed a typical herpetic eruption of very extensive distribu-

tion. The zones most marked are shown by the dotted lines in the cuts. There was a cervical distribution which was sufficiently marked to be accurately followed, but elsewhere it was diffuse and followed no



segmental lines. The second eruption was not preceded nor accompanied by any constitutional disorder, running the course of ordinary herpetic eruption and besides appearing on the surface of the body was also found in the conjunctival, buccal and labial surfaces.

612 Prospect St.

GONORRHEAL OPHTHALMIA, INFECTION FROM A KID GLOVE.

BY FREDERIC GRIFFITH, M.D., NEW YORK;

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THE point of interest in the following history is the mode of infection of the little patient. J., a boy aged eight years, while at play in the street found a lady's kid glove, which he put on and continued to wear in his play during the rest of the day. From rubbing his face the child's left eye became infected and at the end of twenty-four hours inflammation had closed the lids. Owing to ignorance of the seriousness of the affection upon the part of the boy's mother, home remedies were employed until too late to repair the damage. The child was brought to hospital, when it was found that ulceration and sloughing of the cornea had destroyed the sight. Treatment at this stage could do little save protecting the sound eye from further danger of contamination from the profuse purulent discharge coming from the infected orbit and in cleansing the infection. Later the shrunken, distorted organ was removed. The danger which the gonorrheal patient becomes to himself and to those with which he comes in contact must be ever borne in mind by the surgeon, the present instance serving to make this more forcibly impressive.

Book Reviews.

Cutaneous Blastomycosis. F. H. MONTGOMERY. Reprinted from the *Journal of American Medical Association*, June 7, 1902.

Die Blastomykose. A. BUSHKE. Heft 10, Abt. D II., Derm. u. Syph. Bibliotheca Medica. Stuttgart: Erwin Nägele, 1902.

These monographs with Méneau's review in the *Annals de Derm. et de Syph.*, June, 1902, put the subject of cutaneous blastomycosis before the readers of three languages in able and conclusive fashion. Of the three, Montgomery's is most important for it contains his and Dr. Hyde's personal observations on no less than 14 cases in human beings, an extraordinary number considering that the total for the world is 40 odd. Most of their cases, the JOURNAL readers are already familiar with since they were published here first. There is a striking feature in the photographs, the similarity which exists in the clinical aspect of the different cases.

Bushke who has had a case of his own, has published a much more pretentious work illustrated by colored plates of the blastomyces and its lesions chiefly (one clinical photo.). He includes animal blastomycosis also, thus swelling the bibliography to enormous dimensions. Both cultures and clinical appearance give a different impression from our American cases.

Montgomery brings a scathing charge against Ricketts, a sometime laboratory assistant, who published an article in the *Journal of Medical Research* which he entitled "Oidomycosis," a reform in terminology, by the way, which does not reform. Montgomery says he made unauthorized use of his cases, some of which he did not see and on which he did no work, that he appropriated certain illustrations without leave or with the scantiest recognition and that the entire publication was premature. It is hard that investigators and editors cannot be protected against this sort of thing.

There is no need to review Blastomycosis Cutis in these pages where so many of the cases have been reported. Bushke's work on animals is in a measure new to us.

General Paresis. ROBERT HOWLAND CHASE, M.D. P. Blakiston's Son & Co. Philadelphia, 1902.

A book of 291 pages in which the author seeks to convey to the general practitioner the knowledge by which he will be able to make a diagnosis of general paresis in its early stages. He follows Mickle in dividing general paresis into four periods: (1) A prodromal stage, or period of moral and mental alteration; (2) a stage of decided mental alienation, or of dementia only; (3) a stage of chronic mental disorder; (4) a stage of fatuity.

After discussing very briefly each stage, he gives the history of cases as nearly as possible, representing these different stages. Many histories are thus given, but in most cases important details are missing.

He next takes up the varieties of general paresis, mentioning those described by Folsom, B. Lewis Sankey, M. Baillarger, Voisin, Mickle, Meynert and others, expressing no opinion of his own, but apparently accepting the following types: (1) The galloping form. (2) The double form. (3) General pare-

sis of the melancholic form. (4) Spinal general paresis. (5) General paresis with simple progressive dementia. (6) Juvenile general paresis. (7) General paresis in woman.

Following brief remarks about these varieties he gave a few histories of cases representing each.

The particular symptomatology is next discussed. Here also cases are reported illustrating the different symptoms.

A short chapter is given to Differential Diagnosis.

The chapter on Etiology contains quotations and histories of cases taken from other writers. The author does not commit himself. Thus in the same way chapters are given to prognosis, pathology and treatment of the disease.

The Author's own views are little in evidence, the opinions and cases are mostly quotations from other authors, and many of the histories themselves are unsatisfactory. For a general practitioner the book might have been smaller and still convey to him as much as does this one. For a specialist nothing new is contained in it.

M. G. SCHLAPP.

The Operations of Surgery. W. H. A. JACOBSON, M.Ch. Oxon., F.R.C.S. Fourth edition, Revised, Enlarged and Improved. Two Volumes. Volume I., Operations on the Upper Extremity; Operations on the Head and Neck; Operations on the Thorax. Volume II., Operations on the Abdomen; Operations on the Lower Extremity; Operations on the Vertebral Column. P. Blakiston's Son & Co., Philadelphia, 1902.

The fourth edition of this well-known book is well up to date and accomplishes most admirably the purpose intended by its author, namely, furnishing to advanced students and hospital internes a work upon operative surgery sufficiently comprehensive in scope and full in detail.

The different regions of the body are taken up in order. A brief review of the surgical anatomy is first given and a detailed account of the different operations follows. The plates are often admirable and the text is clear, terse, and interesting.

Much discrimination has been shown in selecting the modern operative methods most in vogue and in leaving out the discussion of novel and untried procedures.

The book is generally well in line with modern surgical teaching in this country, and as the authors have borrowed freely from the plates and descriptions of French, German and American works, it represents very well and in concise form the best methods of modern operative surgery.

It is a book which will be valuable alike to the student and the practitioner, and should be classed among the best works upon the subject. HOTCHKISS.

Special Pathology. ALFRED EDWARD THAYER, M.D. Quiz Compends, No. 18. Philadelphia: P. Blakiston's Son & Co., 1902.

This is the companion volume to the General Pathology reviewed in the last issue. Taken as a whole, it is as satisfactory as a little book on a tremendous subject can be, both from the teacher's and the student's standpoint, better than the preceeding part. It has some features which are not very common in any compend on pathology, the best of them being a rather elaborate discussion of the gross appearance of diseased organs. From the average textbook, one would imagine that all pathology is to be read by the microscope from

slides showing bits of tissue stained red and blue. All medicine has or should have its basis in autopsy findings. A serious omission is that of a chapter on diseases of the nervous system but is readily understandable when one considers how successful the neuropathologist has become in weaving, from shreds of topography and half-forgotten bits of general pathology, a veil of esoteric mystery about his specialty. It is no place now for a self-respecting pathologist. The blood should have a longer consideration than ten of these little pages allow. What is there is very well; what is omitted is more than a little. Malformations might very well be left to special treatises and the space used for pure pathology in the next edition. The kidney chapter where faults crop out usually like weeds is good apparently because it does not wander very far from Delafield's teaching except in the terms which are not confusing. There are minor omissions here and there as of Shiga's bacillus in dysentery and the replacement theory in cardiac and hepatic fibrosis which it were well even for a student to know but something must be omitted and the author's choice is final.

There is a chapter on the histopathology of the skin. It contains some of the things we know about and others of which we think the same. As I wrote it myself, I shall dismiss it with the comment of one of my students—that "it takes too much for granted."

J. C. J.

Physician's Visiting List for 1903-4. Philadelphia: P. Blakiston & Co.

This is the fifty-second reprint of the List, a longer career of usefulness now than most of us are likely to have. The effort for improvement has added some pages on incompatibility of all sorts and immediate treatment of poisoning, both likely to be of service in emergency. The familiar features remain.

Les Injections Epidurales par Ponction du Canal Sacré et leurs Applications dans les Maladies des Voies Urinaires. DR. FERNAND CATHELIN, J. B. Baillié et Fils, Paris, 1902.

The title practically tells the whole story; whether or not this new method of administering therapeutic agents has opened up a new field for investigation, the book is very suggestive and most interesting.

The author begins with the history of these methods, and names Corning as the first to work out spinal anesthesia. He then goes into the history and manner in which this particular method, namely, the injection of different substances, mainly, however, normal serum into the spinal canal by way of the sacral vertebra was developed, and the disorders for which it has been used. It would seem that its greatest use aside from that of quelling pain has been in the various forms of enuresis and bladder disturbances.

G. K. S.

Genito-Urinary and Venereal Diseases. LOUIS E. SCHMIDT, M.Sc., M.D. The Medical Epitome Series. V. C. Pedersen, M.D., Editor. Lea Bros. & Co., Philadelphia and New York, 1902.

While as a rule so-called quiz-compendes have always seemed to us a form of medical work to be frowned upon and discouraged, we are pleased to note the thoroughness with which the author has covered his subject and can recommend the work to those who are looking for this class of book.

G. K. S.

Society Transactions.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.

Wednesday Evening, October 13, 1902.

JOHN VAN DER POEL, M.D., *Chairman.*

Urine Separator (Diviseur Vesical Gradue), of Dr. F. Cathelin, Paris.

—DR. JOHN VAN DER POEL.

I had expected this evening that one of our members would also show the Urine Separator of Dr. Luys of Paris, which was brought out about two years ago, unfortunately the Doctor has not brought it this evening. I perhaps ought to apologize for showing the Cathelin instrument, having myself used it so little, though it was demonstrated to me by Dr. Cathelin himself, and I have used it myself with good result. In the first place it is an extremely simple instrument and one that can be used by almost any operator, requiring but little technical knowledge beyond that of being able to wash out a bladder, and perhaps being able to pass a lithorite. Beyond that it is simple enough. It consists in the first place of a hollow tube in the shape of a lithrite, corresponding to a No. 25 French. In the center of this tube is a flat piston, upon the end of which is attached a membrane which separates the bladder into the lateral chambers. Upon the sides of the tube are two openings, into which, and through which, pass two, what would correspond to what we know as, urethral catheters. The preparation of the instrument is as follows: The sterilization in the first place can be done by ordinary boiling, with everything except naturally the gum silk catheters, which are sterilized by formaldehyde. The whole box can be sterilized or simply the instrument itself. After sterilization, it should be prepared by passing one of the catheters through the canal at the side until it comes to the opening at the other end; likewise that of that opposite side. The second step is the injection of a few drops of liquid through the catheters to see that they are permeable. Next attach the membrane or diaphragm to the distal end of the instrument, where it fits into a catch on the end of the piston, and is fastened by means of a little tack, held in place by a spring. The membrane being attached and in position, it should then be oiled with sterilized oil or lubricondrine and then piston withdrawn until it (the membrane) entirely disappears within the shaft. The preparation of the patient is the same as for any cystoscopic examination, that is, the bladder is washed with one of the various solutions at our disposal, after which it is necessary to find out the capacity of the bladder (that is, not its greatest capacity, but the point where the patient first desires to micturate). The instrument has been used by Dr. Cathelin with a patient who had a capacity of about 18 grammes, and was kept *in situ* for 14 minutes. This is the smallest one on record, I think. It can be used with almost any sized bladder, but I think in extremely large or sacculated ones it might not be applicable. After deter-

mining the capacity of the bladder, then inject 10 c.c. of our sterile fluid, in order to afterwards start siphonage. The instrument is then passed and the catheters introduced, *i. e.* protruded at the distal end into the sides and lower part of the bladder. The distance which they should be introduced depends upon the capacity of the bladder. If it is one of 100 grammes they should project 2 ctm.; if 200 grammes, 4 ctm.; if 300 grammes then 6 ctm., which distance can be measured by markings on their proximal end. After introduction, the beak of the instrument is brought back snugly against the symphysis pubis, which brings the inferior portion with part of the membrane into the posterior urethra, so that part of the membrane lies in and divides the posterior urethra as it does the bladder. After it is drawn against the symphysis pubis, then protrude the membrane corresponding to the number of grammes which the bladder will hold, which are marked upon the proximal end of the piston. It is then brought upwards slightly, not being left exactly in a horizontal position, so that the membrane will fit better into the bladder floor. The edge of the membrane is composed of a thin wire, which prevents it from collapsing. The fluid which we have injected will then begin to flow easily and rapidly, but if they do not run immediately it is a very simple matter to inject a few drops at the end of either one, to start the flow. The usual sitting is not over 30 minutes, allowing eight to ten minutes for getting it in working order. The urines are then collected into the glasses or tubes, the outer end of the instrument being held firm and resting on a stand, consisting of the lid of the box, into which is secured a sliding rod, for male or female patients. The patient is prone upon the table, with head slightly raised, and thighs separated. There are bladders, of course, where it would not be applicable, but there is no one instrument so far that will answer in all cases. There is no pushing up (as in the segregator) of the wall of the rectum, and no forming of a partition in the bladder, except by the membrane which is introduced. The removal is simple. First withdraw the catheters, and then the membrane, after which release the instrument as one does a steel sound.

DISCUSSION.

DR. CHAS. L. GIBSON said he was sorry that he did not bring the segregator of Dr. Luys. He believed it to be a simpler instrument than the one presented, shaped like a lithotrite, with a diaphragm operated by a screw at the handle, and a rubber bridge, which alone forms the division of the bladder. It can be worked only in an empty bladder. There are no catheters attached and the bladder-urine flows directly into the openings on either side of the diaphragm. From that standpoint he thought it was superior to this instrument although the one presented seemed more effectual. It did not exclude bladder-contamination which was a point quite fatal in all these instruments. It might be wisest to employ all of them a control by injecting on one side some methyl-blue, to ascertain if there is leakage on the other side.

Specimen of Vesical Calculus.—DR. SWINBURNE said he had a case last summer that presented some features of interest. A calculus, rather soft, was removed by litholapaxy. The method by which he discovered that the patient had a calculus he thought might be of interest to the section. The patient had frequency in urination, the urine was cloudy, there was pain at the end of urination, and no venereal history was given. At the clinic he had so many patients with prostatic trouble presenting similar symptoms that he thought that possibly prostatic trouble

might exist in this instance. Examination by the rectum revealed a condition which exactly resembled an enlarged prostate, but pressure with the finger seemed to cause one-half the prostate to disappear. It seemed to him as if a calculus was wedged behind the prostate when the bladder emptied itself, and to the finger its rectal surface was continuous with that of the prostate. A searcher introduced into the bladder at once revealed a stone. This patient had only been in this country about two months and he had had the pain about six months. Another feature of interest in this case was the question whether litholapaxy or a cutting operation was better. At first he believed that the stone might be contained in a cavity behind the prostate, but when fluid was introduced into the bladder for cystoscopic examination the stone was shown resting on a perfectly flat surface, and it seemed to him a clear case for the operation of litholapaxy. The operation was done in a tenement-house, on the ground floor, in a dark room, and under the influence of chloroform. After introducing the lithotrite and catching the stone between the jaws there followed a sensation exactly like that when the stone slips from the grasp of the instrument. Again he caught the stone, and thought he had caught a smaller end of it, and on closing the jaws thought it had again slipped. The third attempt was followed by a similar result, and then he could not find the stone. After ineffectual search for the stone, the evacuator, when introduced, brought away all the fragments. The stone had been crushed by three movements of the lithotrite. Such an experience had never occurred to him before. Of course it was due to the softness of the stone. The operation was performed last August, and the patient is in good condition to-day.

The sensation described of pressing the calculus into the cavity of the bladder from where it seemed wedged behind the prostate was verified four days in succession. It occurred when the bladder was empty, and made him think it had formed a pocket for itself behind the prostate. The cystoscope, however, showed no sacculation whatever.

A Case of Rectal Gonorrhea.—**DR. GRIFFITH** presented the history of the result of pederastic acts upon the part of a patient, and it gave a glimpse of a form of male prostitution as carried out in this city, and showed furthermore the precautions which seemed necessary, as had been shown in the recitals of Kraft-Ebing, and which were taken in this case to prevent blackmailing of those who participate in this form of sexual indulgence. J. M., a male twenty years old, a driver by occupation, had always been healthy and possessed a well-formed body. Said he had indulged in sexual intercourse very frequently. He came for treatment for a violent, creamy, yellow discharge from his penis which had lasted three days. His statement of the source of his trouble was that seven nights before, while lounging on a corner, he was approached by an affable stranger who invited him to visit a saloon. While not in the habit of indulging in intoxicants, he accompanied his new-found friend and partook of a glass of beer. Entering into conversation, he was invited and accepted an invitation to take a trip to Philadelphia. Although himself without money, his new friend appeared to have plenty of means. The pair journeyed to Philadelphia, and late the same evening secured a room at an expensive hotel, and the end of the proceeding was that M. had intercourse per rectum three separate times during the remaining hours of the night. The two returned to this city early the next day where M.'s friend, before losing himself in the crowd, gave him \$5. M. described his erstwhile friend from his build and by his actions as being a "sissy." He had noted also that during penetration the man's buttocks

were wet, and that his anus was patulous. M.'s subsequent symptoms were those of a typical gonorrhea, with the demonstration of gonococci.

A Case of Ruptured Kidney.—DR. RAMON GUITERAS reported the case of a laborer, 29 years old, who was brought to the hospital suffering from a pain in the right side which he said existed for several weeks. Examination showed a cachetic individual, thin, emaciated, with the thigh slightly flexed upon the abdomen. On the right lumbar region was a mass filling the entire iliocostal space behind and extending well over towards the median line in front. This was ill defined having no distinct contour as would have been the case of a large kidney, and was hard and indurated to the touch. No fluctuation could be felt. The urine was of a specific gravity of 1.026, high colored, thick, contained a slight trace of albumen, a large amount of pus, few blood cells, bladder and renal epithelia, granular epithelial and pus casts, uric acid crystals. The patient's condition was very bad. He had been for some time in a workman's hut in an adjoining village. His pulse was 130, temperature 102, respiration 28. He was brought to the operating room, quickly anesthetized, and a lumbar incision made. This was followed by a gush of pus estimated between one and two pints. The finger inserted into the pus cavity found a large space in the loin not extending to the pelvis or above the abdominal cavity. The kidney could be felt somewhat enlarged, sclerosed, and in the posterior aspect a hole was found into which the finger inserted felt a sharp foreign body which was loosened and removed. This proved to be a calculus an inch and a quarter long and one half an inch in width. The wound was quickly packed, the incision made smaller by two ligatures through the abdominal wall above, the drain coming out below. The patient was discharged from the hospital. One month later he returned in a condition worse than before with his leg and thigh more flexed. He hobbled to his bed with his hand resting on his thigh for support, and his body bent towards that thigh. The wound was still closed, there was tumor in the iliac region, and there seemed to be deep seated swelling in the front of the thigh extending down midway to the knee. The patient was again anesthetized, the old wound opened from which some pus escaped. A counter opening was made in the iliac region which communicated with the lumbar opening. Another opening was made in the anterior part of the thigh midway to the knee and more pus was evacuated. Drains were inserted from the lower to the iliac region and from the iliac to the lumbar. The kidney was densely bound down by adhesions and it was thought better to wait to see the result of the operation before attempting possibly a nephrectomy. The lower sinuses closed only one remaining in the lumbar region. The patient left the hospital to recuperate during the summer and we were to notify him when to come in for a nephrectomy. He now cannot be found. I am sorry that I have not the case to present, or the pictures to show that I expected to have this evening.

DR. JAMES PEDERSEN—I have seen one similar case. The occurrence took place during intoxication of the patient.

A New Method of Finding the Urethra in External Urethrotomy—DR. CHAS. L. GIBSON read this paper. The modification of the operative technic was intended to give an immediate and certain entrance to the deep urethra in strictures not permitting the introduction of the ordinary guide. As the result of repeated trial upon the cadaver he found that sharp traction on the prostate downward and somewhat backward will make taut the deep urethra to a degree that makes its recognition unmistakable. With the patient in the lithotomy-posi-

tion, the rectum is thoroughly washed out, a rectum speculum introduced, and the prostate-transfixed laterally from the rectum by a large, sharp hook. A median perineal section is then performed. The left forefinger is introduced into the wound, and as an assistant tugs gently on the hook one readily receives the sensation of transmitted tension of the urethra. The surgeon then directs the bistoury into that portion of the deep urethra, which has been made prominent, the probe-pointed director readily glides into the lumen of the urethra, and following it the small metal catheter will demonstrate the successful entrance into the bladder.

DISCUSSION.

DR. LILIENTHAL said that although he had had considerable genito-urinary surgery, he could not agree with Dr. Gibson when he said that the operation of perineal urethrotomy without a guide is a simple one in any case. He thought that any improvement in technic which will render the operation more certain, and especially more rapid, is very much to be desired. He thought many lives have been lost by too long perseverance by the surgeon in trying to reach the goal through the perineal wound only, and in fact he had lately never hesitated in cases in which the patient's condition was poor and in which the search promised to be tedious, to perform suprapubic cystotomy and retrograde catheterization. He thought Dr. Gibson's idea an excellent one to save making another wound. It seemed to him that if we have a wide perineal opening and make our dissection anterior to the rectum and can feel the prostate with the finger, that the same procedure could be employed through the perineal wound instead of through the rectum without the possible chance of infecting the prostate through the rectum. He thought we owed Dr. Gibson thanks for calling our attention to such a very simple method.

DR. J. PEDERSEN thought that Dr. Gibson deserved great credit not only for the novelty of his suggestion, but also for having proven its feasibility on the cadaver and its value clinically to his satisfaction before reporting it. In regard to the suggestion made by Dr. Lilienthal, that the hook be inserted and traction made by way of the perineal wound, it occurred to him to say that the time required to dissect down upon the prostate in order to transfix it would more than counterbalance the very slight risk of using the hook by way of the rectum, as one of the prime results of Dr. Gibson's technic is the saving of time; furthermore, that while dissecting down upon the prostate for the purpose of transfixing it, we could just as easily find the urethra at the apex of the prostate.

DR. GIBSON said that in the ordinary urethrotomy through a vertico-median section he had also attempted to produce traction upon the prostate, but never with satisfactory results, never approaching in effectiveness the other method. One must get a good purchase upon the prostate, fix it and manipulate it. He had never tried the transverse incision for such cases, as it involves a rather extensive dissection of the perineum.

Repair of Complete Defects of the Male Urethra.—DR. A. A. BERG said that the urethra possessed two attributes that are of importance in the consideration of plastic surgery upon it; namely (1) its considerable elasticity, especially in its penile portion, in virtue of which it can be distracted, so as to supply a defect in its continuity between two and three cm. in extent, and (2) its power of almost complete regeneration from a stump. The parts of the urethra that re-

generate are the mucosa and cavernous body. Juglianni demonstrated that a small stump of the urethra implanted into one end of an artificial canal made under the skin will grow and gradually line the interior of the entire canal. The types of plastic operations, to supply defects, and the indications for their employment are:

1. The method of mobilization of the urethral stumps; stretching them until the ends meet and uniting them in this position by end to end suture. It is especially applicable to small defects in the penile urethra; *e.g.* hypospadias, but it can be also employed in the membranous portion of the canal. Its limitations are (a) large defects, exceeding 2 to 3 cm. in extent; (b) lack of mobility of the urethral ends owing to cicatricial tissues, or (c) too great friability of the urethral ends from preceding inflammation.

2. The method by which defects, partial or complete, are healed by the regeneration of the urethra from its ends (Guyon's operation). This procedure has a wider range of applicability, its only limitations being too extensive destruction of the soft parts overlying the defect, or too extensive cicatrization of these tissues.

3. The method of forming a new canal by grafting skin or mucous membrane, either from the immediate vicinity or from other parts of the body, upon the site of the defect and then uniting such grafts to the proximal and distal ends of the urethral wall. This operation has but a limited range of applicability, and is to be employed only where the others are contra-indicated. In the original paper, the technic of the various operations is minutely detailed. The author details two of his cases of large defects of the perineal urethra, due to extensive sloughing, in which the Guyon operation was employed, with complete restoration "ad integrum."

DISCUSSION.

DR. JAMES PEDERSEN said that Dr. Berg's paper was most interesting; particularly so because defects in the perineal portion of the urethra are generally held, he believed, to take care of themselves, so to speak, if treated after the manner of an ordinary perineal urethrotomy. Of course there are exceptions to this rule, as would seem to have been the case in the cases cited by Dr. Berg. He wished that Dr. Berg had detailed one or more cases of defect in the pendulous urethra, where defects are more difficult to repair. He knew that he had labored industriously over one or two cases of defect in the middle portion of the pendulous urethra. Defects near the meatus are easily repaired, provided there is integument enough to form a good flap. He had secured very satisfactory results in two cases in which there was quite an extensive defect on a level with the corona. Last winter, in a case of defect at the peno-scrotal angle, he secured a perfect result by using a fold of scrotum for the flap. He added that in the first two cases quoted, perineal drainage was maintained during the healing, and that in the case last mentioned advantage was taken of a necessary epicystotomy.

DR. LILIENTHAL had found it advantageous in cases of this sort not to close the skin by suture, not to close the skin opening at all, for that matter, for the following reason: He had in one case the misfortune to have a leak between the sutures and this leak became septic. There was a complete giving way, owing to abscess, of the entire line of union, and a dissection of the subcutaneous tissues by pus. If the line of suture of the urethra is covered by rubber tissue, then

gauze, and bandaged firmly, even if there is a little leak the urine will find its way out. There will be no tension, no dissection, and during granulation this opening will close spontaneously, whereas if the skin is sutured, suppuration takes place between the skin and the underlying sutures and the entire wound will reopen. Therefore in these cases, as in a number of others, he does not close the skin wound; you cannot be perfectly sure of your asepsis.

DR. VAN DER POEL was inclined to agree with Dr. Lilienthal, and Dr. Gibson. I had had a similar experience to Dr. Lilienthal, and would prefer simply to close the urethra, at the beginning and allow the granulation to complete the filling in, when in case a few drops of urine do leak out, they will do no harm.

He would be very loath to close in a fresh rupture of the urethra completely, and would treat it somewhat like a case of external urethrotomy, until the sinuses close.

DR. A. A. BERG closed the discussion.

As regards the immediate suture of the two urethral ends, the advisability would depend very much upon the condition of the parts at the time of the primary operation. In infected sloughing tissues it could scarcely be considered as the best procedure. In clean tissues it would be apt to be followed by a good result; likewise where the urethral ends are not too far separated or where the rupture is incomplete.

As to dealing with a partially or completely lacerated urethra, in which there is a loss of substance of the urethral wall, as with an external urethrotomy, it must be borne in mind, that after even a simple, external urethrotomy for stricture, where there is no loss of substance, but merely a linear division of one wall, a perineal urethral fistula at times persists. This is due to the mucous membrane of the urethral canal growing out and lining the sides of the perineal wound. There is at present in the wards of Mt. Sinai Hospital such a case; a young man upon whom an external urethrotomy for stricture was performed in one of the City Hospitals.

To heal such a mucous fistula it is necessary to dissect out and remove all the adventitious mucosa, and close the urethra by suture.

Some cases of partial rupture will heal when treated after the method of an external urethrotomy; yet there are many more in which there will be no tendency to a spontaneous closure of the defect; as in my second case.

As regards complete closure of the perineal wound, Guyon never had any serious suppuration of the stitch holes. In one of my cases the stitch hole infection did not interfere with healing. If the skin is left open, a secondary infection of the deep sutures may occur. The ultimate result in a majority of the cases will probably be better if the wound is completely closed.

Defects in the penile urethra do not belong to those for which the Guyon operation is advisable. They are better treated by mobilization and suture of the urethral stumps.

NEW YORK DERMATOLOGICAL SOCIETY.

*305th Regular Meeting, September 23, 1902.*OSCAR H. HOLDER, M.D., *President.***A Case of Iodide Eruption Papulo-Vesicular, General.**—Presented by DR. S. SHERWELL.

E. L., aet. 40, U. S., married, came to office June 19th with 5 or 6 small vesicles one or two of which were ruptured around corona glandis. Herpes progenitali of typical variety—dusted him lightly at time with calomel, told him to repeat it once or twice a day, keep clean and report, which he did. On 24th saw him again. All had disappeared, not a reddening or scar left. He had been exposed once or twice within a fortnight previously, but had taken all precautions apparently. On or about 24th of July did not even make entry in books, reappeared at office, examined him naked; no eruption, in perfect health in every way. On 3d of August came in with diarrhea and with a bubonic enlargement in *left* groin, inflammatory in character; the rest of the glands not swollen, and no adenopathy on right groin. Examined crural canal on side affected and found slight tendency to patency of ring. Enough with that straining, etc., to cause irritation of canal and parts adjacent. Gave him lotion of mildest iod. tinct. and KI. to apply. On 10th of August bubonic enlargement quite marked and deep fluctuation, a slight eczema on parts where lotion had been applied and a streak across upper breast, as if he had wiped or scratched his fingers across it. Called in Prof. H. H. Morton, as he was terribly syphilophilic, who without a moment's hesitation negatived the idea of syphilis as to the eruption, and recommended ablation of the glands of left groin as the quickest way to do away with trouble. He then left me and consulted another physician, who treated with antiphlogistine till August 27. Then opened and evacuated pus. *Had no eruption, as now appears, up to that time.* He had previously (a few days) put him on doses of Pot. Iod., 5 grn. doses, a few days after he had a bad (very) coryza and the eruption of the papulo-vesicular character commenced to appear. After rather more than two weeks of the Iod. Pot. treatment, it was supplemented by 4 $\frac{1}{4}$ gr. tablets of Hydrarg. Id. under which the eruption has become worse. Had an inflammatory tonsillitis as well, which is getting better without treatment since stopping KI.

DR. H. G. KLOTZ said that it was remarkable that such a severe eruption should have developed in this short time.

DR. J. A. FORDYCE said that many of these cases were mistaken by the general practitioner for papulo-pustular syphilides, and were treated, in consequence, with mercurials and iodides, with the result that they were made worse. Such a mistake was very easily made.

DR. C. W. ALLEN agreed with the diagnosis and indorsed the remarks that had been made. He had seen a similar eruption produced by self-medication with certain preparations of so-called sarsaparilla. In the presence of an eruption of this kind it was possible for a quack to reap quite a harvest by preying upon the fears of the patient.

DR. J. C. JOHNSTON said that fifteen grains of iodide were sufficient, according to his experience, to produce such an eruption. Last spring he had

had two patients for whom he had prescribed fifteen grains of iodide of potassium, three times a day. One took two and the other six doses. Both of them immediately developed a very sore throat, a marked coryza and congestion of the eyes. Examination of the interior of the latter showed all of the vessels congested and even the optic nerve. One of the patients did not recover for thirty days although he had only taken thirty drops of a saturated solution of iodide.

DR. SHERWELL said that on two or three occasions he had seen a patient in hospital presenting such an eruption that smallpox was suspected, and the Board of Health officials had been called in. This had followed only a very moderate dosage of the iodide. He had known a very few grains of bromide would likewise produce a marked eruption, though the lesions were usually flatter and broader than the iodide dermatitis.

A Case of Epithelioma Treated by the X-Ray.—Presented by DR. C. W. ALLEN.

The patient was man who had been referred to him by Dr. Holder at the last meeting of the society. The man had had an extensive carcinoma on the wrist for twenty years, which had exposed the bones and tendons. Since last presented to the Society the patient had been treated by the X-ray and about two-thirds had healed.

DR. GEORGE T. JACKSON said that the result was certainly very brilliant, and better than could have been produced by any other means at our command.

DR. JOHNSTON suggested that this patient be photographed at successive stages, and the photographs reproduced when the case was published for the sake of the "doubting Thomases."

DR. FORDYCE suggested that it might also be well to fortify the diagnosis by having a microscopical examination made of sections of the growth. Such sections were often instructive when taken both before and after X-ray treatment.

DR. I. DYER of New Orleans said he believed that the X-ray was curative in epitheliomata characterized by granulomatous tissue.

DR. FOX said that he had had an opportunity of watching the case, and while the result was brilliant he could not accept the statement that such a result could not have been obtained by any other method. He thought it probable that the same result would have followed the use of liquid air, though he did not mean to say that this was as good or better than the X-ray. He would also say that the same result could be obtained by thorough curetting.

DR. O. H. HOLDER said that when he had first seen this patient he had probed around and found the tendons all exposed so that the use of the curette or of liquid air would have probably aggravated the condition. The base of the growth was apparently down among the muscles, tendons and bones.

DR. JOHNSTON remarked that in such cases the rule among surgeons was to amputate the limb.

DR. ALLEN said he now had under X-ray treatment a patient who had been treated by the liquid air until nothing more could be accomplished with it, yet decided improvement was taking place under the X-ray. He did not think the liquid air could be compared with the X-ray.

A Case of Prurigo.—Presented by DR. CHARLES T. DADE.

The patient was a baby of two years, who had had a mild form of prurigo almost constantly since the age of six months.

DR. KLOTZ said that this seemed to be a genuine example of prurigo. He

had presented a number of mild cases some years ago. One of the children, who was conceded to have a mild prurigo, had been seen by him some years later, and was found to be cured. In a typical case in a male adult, which had developed in Europe, and which came under observation for some other affection, the conditions had apparently not improved, and the patient did not care to be treated for it again.

DR. FORDYCE accepted the diagnosis.

DR. ALLEN said he did not think prurigo was nearly so uncommon in this country as it had been thought to be ten or fifteen years ago. In his experience at the Good Samaritan Dispensary he felt sure that he had seen it in a number of children born in this country. This year he had treated and demonstrated a case of prurigo at the Post-Graduate Medical School which had apparently recovered.

DR. SHERWELL said that he did not recall having seen such a marked case of prurigo in so young a subject before.

DR. JACKSON said that the father of the child was said to have had the same cutaneous disease in Europe and that it had disappeared when he was thirty years of age. Most of the cases of prurigo seen in this country were of foreign parentage.

DR. HOLDER agreed with the diagnosis of prurigo and said that a case under his care at Randall's Island was nearly well during the summer, but the disease had returned after the patient had been bathing in the sea.

DR. DADE said that these cases did not seem to him to be so very rare at the clinic. He recalled one case in which the disease had been held in check by the use of sulphur ointment, cod liver oil and iron, but there were exacerbations from time to time, though they were becoming steadily less severe.

A Case of Inveterate Psoriasis.—Presented by DR. G. H. FOX.

The patient was a young woman, presented a second time with obstinate psoriasis which had resisted many methods of treatment, both internal and external. The urine had been alkalized most thoroughly but the psoriasis persisted. Dr. Allen thought the X-ray treatment would be beneficial, the patient had been subjected to that treatment under the care of Dr. Allen. As a result of this treatment of the left hand the eruption had increased, extending up to the elbow, and presenting a severe dermatitis. A ten per cent. pyrogallol ointment had been applied to the right hand but with little benefit except a slight reduction of the thickening.

DR. SHERWELL said that only a few hours ago he had seen a case of inveterate psoriasis which had been previously treated by three members of the Society in various ways without effect. He was glad to say that the case was nearly well now under following remedies. He had given him the following tonic:

Quinine	gr. xxx.
Magnesium Sulphate	oz. j.
Sulphuric Acid Dilute	dr. iij.
Tinct. Nux Vomica	M. xxx.
Wine of Colchicum.	
Fl. Ext. Secale Cornutum aa.....	dr. ʒiijss
Glycerine	oz. jss.
Water	oz. ij.

Misce. Sig. A dessertspoonful morning and night in a wineglassful of water, $\frac{1}{2}$ tumbler of water to be taken directly after.

The following local application was also used:

Liq. Carbonis Detergens	dr. iij
Acidi Salicylici	gr. xv-xxx
Sp. to Dest.	m. xxx
Ungt. Aq. Rosæ	dr. xj

The improvement that had taken place in the past three weeks under this treatment had been very marked. He thought the antilithemic effect of colchicum was too much neglected in favor of the salicylates

The speaker had found chrysarobin very different in quality from various sources, both in action and in characteristic staining of integument.

DR. JOHNSTON suggested the use of ergotin internally and tar externally. The part, after painting, is immersed in hot water for twenty minutes. In chronic erythematous conditions this application was remarkably efficacious. - The chrysarobin of the present day, it should be noted, it not nearly so powerful as formerly.

DR. FORDYCE said he had seen good effects from Unna's compound chrysarobin ointment, ichthyol, resorcin and chrysarobin, in these inveterate cases of psoriasis.

DR. I. DYER said that he had used the gelaceto-phenone a good deal, and had found that it produced much the same effect as chrysarobin without the staining and constitutional effects. He had also used thyroid extract, especially when the eruption was discrete. He scarcely ever used arsenic, believing that the staining which resulted was much more undesirable than any result that might be obtained without it. The thyroid extract and the iodide of sodium answered almost the same purpose.

DR. FOX said that some years ago he had called attention to the fact that the chrysarobin then in the market was greatly inferior to that of earlier years. He thought it would be well to go back sometimes to the Goa powder. He had tried various brands of chrysarobin on the case under discussion with no better result. He was grateful to Dr. Allen for trying the X-ray treatment, and had really hoped it would do some good. He had used ichthyol pure in this case, and also combined with chrysarobin, but neither had had any good effect, although it had proved useful in other cases.

DR. DADE said that he had had some very obstinate cases which had yielded admirably to the application of a drachm of chrysarobin to the ounce of a fifty per cent. watery solution of ichthyol. This painted on and allowed to dry, which it does readily, remains for several days. It was slower in action than the ointment, but did not stain the clothing or cause a spreading eruption. In eczema of the nose, where it is always difficult to retain an application, the chrysarobin and ichthyol would be found very useful. It caused no smarting and was very beneficial.

DR. FOX said that he had used this application in many cases, and although slow in its action he had found it efficacious and much less objectionable than the ointment. It would sometimes stain the clothing slightly, though this could be avoided by the use of a dusting powder.

DR. H. G. KLOTZ said he had used it in a few cases of so-called eczema marginatum in which he had almost abandoned the use of chrysarobin because of the irritation which it produced. He had first applied the chrysarobin in chloroform, and after this had dried had painted the part over with ichthyol.

A Case of Lupus of the Nose Treated by the Finsen Light.—Presented by DR. G. H. FOX.

The patient was a woman with lupus of the nose. She had been presented to the Society some time ago. For some years the disease had been apparently cured by tuberculin injections, but it was probably never cured on the inside of the nose, and new nodules had appeared on the outside. Twenty treatments with the Finsen light had been given at the Presbyterian Hospital, this treatment being confined to the right side of the nose, while the same number of times he had himself applied the burr to the other side of the nose. For three months there had been no treatment at all, and during this time the diseased area had become a little worse. Dr. Fox said he thought all would agree that the side treated by the burr, which was the worst side, improved far more than the other side. It was only a matter of a little more treatment with the burr to make the result on that side perfect.

DR. ALLEN said he would like to see the effect of two or three months of X-ray treatment of this case, believing that the improvement would be greater than after the Finsen light treatment.

A Typical Case of Lichen Ruber (Hebra).—Presented by DR. FOX.

The patient was a woman whom he had first seen at the Skin and Cancer Hospital that day. The eruption was found in characteristic patches at the bends of the elbow, the neck and lower part of the back.

DR. DADE remarked that he preferred the name of pityriasis rubra pilaris because it seemed to him to correspond more closely with the published description of the disease.

DR. SHERWELL said that he also preferred that name because he did not think that this woman was going to die from this disease, yet this had been the termination of most of the reported cases of lichen ruber, as well as those seen by himself. He looked upon the case under discussion as a typical example of pityriasis rubra pilaris or so-called Devergie's Disease.

DR. ALLEN thought there was a good reason for keeping both names. If only one name were retained, then it must be admitted that there are certain cases which did not conform to the clinical type, and did not have the "pilaris" feature. The form presented this evening was more common than that of true lichen ruber.

DR. JOHNSTON said that he thought it was generally recognized that there is a true lichen ruber acuminatus, which does not begin on the back of the hand or present a hyperkeratosis.

DR. DYER said that he had first seen this patient that day and had at once made a diagnosis of pityriasis rubra pilaris, although he had only seen one case before that. In cases of lichen ruber that he had observed the characteristics had been very different and even in the late states the papular character was maintained, whereas in the present instance there was a tendency of the lesions to break down and scale and form a patch, which sometimes became quite raw. For these reasons he thought the two terms should not be applied to the same disease.

DR. FOX asked where we were to go to get our idea of a certain disease. We all had our clinics and met with these cases from time to time, and had an opportunity to study them. It had been his fortune some years ago to see an unusual number of them, and he was positive that all of them were one and the same disease. Lichen planus had been confused by the Germans with

lichen ruber, but was recognized here as entirely distinct. He would no longer contend, however, that lichen ruber is never umbilicated. All of the cases that had been presented here in this city were certainly one and the same disease. Hebra's cases had terminated fatally, and nearly all of the cases that he had himself seen had died. He had never known one of them to recover permanently. The text-book descriptions of lichen ruber and pityriasis rubra pilaris were largely copied from foreign writers, were indistinguishable and really applied to the same disease. Hebra had described the disease so accurately that he deserved the credit of the name, and as lichen ruber was shorter he personally preferred it to pityriasis rubra pilaris, though he cared very little which name was selected so long as only one disease was admitted to exist. There were three distinct clinical forms, viz.: (1) the papular form; (2) the squamous form and (3) the rugous form. The papular and squamous forms were present in the case presented this evening. A case would at one time be entirely papular and at another time squamous. The speaker said that he had studied this disease very carefully in its clinical aspects, and felt very positive that his position, founded as it was on personal clinical observation, was correct.

A Case of Follicular Keloid of the Neck.—Presented by DR. FOX.

The patient was a young man with what some might call a dermatitis papillomatosa on the back of the neck. One patch had been burned and scraped without benefit, and the same was true about another patch upon which the electric needle had been used.

DR. ALLEN said that he was uncertain the condition now presented had begun as dermatitis papillaris capillitii, but certainly at the present time it was keloid. There was a fair chance of success he thought from X-ray treatment.

DR. G. T. JACKSON remarked that most of the keloids on the back of the neck he had seen had been in negroes.

DR. DYER looked upon these as merely hypertrophic scars, a condition very common in the South. In New Orleans one often saw in the negro keloid with absolutely no previous history of injury. It was chiefly found on the chest, arms and abdomen, and very rarely on the face. He thought the case one of dermatitis capillitii.

DR. SHERWELL said some authorities thought it doubtful if keloid was ever non-traumatic; it was more reasonable to suppose that even keloids supposed to be spontaneous in origin were the result of some slight trauma such as the prick of a pin. Even the scratching of acne pustules, or the ulcers resulting from the folliculitis as in the present case might be primary factors.

DR. ALLEN referred to a published case in which there were immense bunches of keloid starting from the lobule of the ear, the result of piercing the ear for earrings.

DR. DYER thought that many keloids were undoubtedly spontaneous, as for example, over the sternum, where the probability of injury was not great, and where the keloid was covered by true epidermis—in other words, when there was no true scar tissue. In a few of the cases he had seen, the keloids were general without any history of such extensive traumatism. He had never seen spontaneous keloid in the white.

DR. FOX said that often after syphilitic ulceration there would be a raised scar simulating keloid, but it could be removed by incision or destroyed by the electrolytic needle. The case under discussion was apparently one of secondary keloid. There were no claw-like processes or the characteristic surface, nor was

there pain, but the growth could not be destroyed permanently, and was, therefore, a true keloid. The prevalent use of the term, *dermatitis papillomatosa* (Kaposi) was largely due to an undue reverence for foreign names without regard for convenience or propriety.

A Case of Alopecia Areata with Atrophia Ungulum.—Presented by DR. G. H. FOX.

Aged twelve years. Mother says that child was born with good head of hair but that it all fell out in infancy, and he was completely bald until he was seven years of age. Since then more or less hair has come in and fallen out from time to time, but no hair has ever grown upon occipital region. Mother also states that the boy has always had trouble with his nails since he was born, they having been brittle and deformed.

Present Condition. The usual appearances of alopecia areata are seen on head, the hair being absent from certain areas and growing luxuriantly from other regions. The most marked patches are along the border of the hair both posteriorly and on the sides. The nails of all the fingers are thin, brittle, longitudinally striated, and exfoliating in plaques specially at the anterior parts. Where these plaques are the appearance is as if a piece of the nail had been scraped away so as to leave only a very thin plate over the bed. The lunulæ of all the nails seem unaffected. There are no signs of inflammation.

DRS. JACKSON and DADE both expressed the opinion that the combination of alopecia with the disease of the finger nails was certainly a strong argument in favor of the trophic theory of the origin of the disease.

A Case for Diagnosis.—Presented by DR. CHARLES T. DADE.

The patient was a man with a peculiar condition of the nails of all the fingers. The patient said that this condition had commenced about six months ago with a dryness of the nails, and that the nails of the toes became similarly affected. The man was employed in the record room of a machine shop.

DR. H. G. KLOTZ said that with the atrophic conditions of the nails there was uniformly a turning in of the skin about the nail.

DR. JOHNSTON inclined to the neuropathetic theory of origin. The object of treatment should be to improve the circulation locally. In rare instances arsenic would act beneficially, but in the few cases in which it was indicated the arsenic must be given up to the physiological effect. The improvement of the local circulation was best effected by keeping rubber finger cots on the fingers.

DR. FOX said that the marked feature of the case was the rapid development of the atrophy. From local treatment he would expect very little except the protection of the nail. While generally opposed to the use of arsenic, experience had taught him that in trophic disturbances of the nail arsenic was the only internal remedy to be depended upon, and that the drug must be pushed to its physiological effect and must be continued for some time.

Selections.

GENITO-URINARY DISEASES.

Present Methods of Treating Ureters Severed During Abdominal Operations. —By W. R. NICHOLSON, M.D. (*American Journal of the Medical Sciences*, April, 1902, p. 676).

Until within the last few years, any injury to the ureters demanded either a nephrectomy, or at least a ligation of the lower end of the upper fragment. Recently various methods of avoiding these measures have been proposed. These methods may be divided into three classes: First, anastomoses made with other viscera in the abdominal cavity as into the bladder and bowel; second, reunion of the several ends of the cut ureter, or uretero-ureteral anastomosis; and third, anastomosis with the external surface of the body, as upon the skin, or into the vagina and urethra.

If the whole truth were known, a percentage of deaths ascribed to shock and faulty anesthesia would be found in reality to be cases in which ureteral injury was the actual cause of death. Injury may follow ligation of the ureter, or by cutting or tearing it in the enucleation of tumors or inflammatory masses. The most usual situation of the trauma is at the bottom of the pelvis near the base of the broad ligaments.

Quite a number of operators favor the implantation into the bladder in all cases occurring below the pelvic brim, *i. e.*, where the distance from the point of injury to the bladder is not so great as to preclude the possibility of an anastomosis between them. Kelly thinks this operation should not be allowed to invade the province of uretero-urethral anastomosis. He prefers to perform the latter operation in cases where both the severed ends of the ureter are easily accessible, when no obstruction is present between the lower end of the ureter and the bladder, and when there is no carcinomatous trouble necessitating the sacrifice of the lower portion. If, however, any of these conditions were present, he too would perform a uretero-cystotomy. Baldy, who has done this operation several times with success, claims that it may be done with success at any point of the pelvic portion of the ureter. He calls attention to the apparent increase in the length of the ureter, which results from its dissection from beneath the peritoneum by which its markedly curved course is converted into a straight line. Kelly has recently called attention to a ureteral guide which he introduces into the bladder through a small incision in the wall, and then passes out through the usual bladder incision. Upon the bar of this instrument is threaded the upper fragment of the ureter, and then it is easily drawn into the bladder and the usual stitches applied. This procedure presents the objection that it makes necessary an extra incision in the bladder wall, which seems an unnecessary traumatism, since the free-hand method of operation (Van Hook's) has not presented any marked difficulty. Emmet claims that the chance of bladder infection in bladder anastomosis is greater than in the case of uretero-ureteral anastomosis, because in the former operation the normal orifice of the ureter is not preserved. The real safeguard, however, is not the so-called ureteral valve, which is probably non-existent, but the presence of an uninjured vesical mucous membrane. As further evidence it may be mentioned that in experiments in which the ureters were implanted in the bowel, it was found that the mere im-

plantation of the ureteral orifices alone did not prevent infection, while if a portion of surrounding mucous membrane were transplanted uninjured with the ureteral orifice, the chance of infection was greatly reduced. Bovée believes that one of the possible dangers of the bladder implantation is that either a constriction of the ureter will be caused, with its resulting evils of hydronephrosis, or that a too free opening, with the absence of the valve, may permit a backward flow of urine, with the same result. These complications, however theoretically possible, have not been observed in practice by Nicholson. The backward flow of urine in any case of bladder implantation, which is certainly even theoretically only problematical, will in practice be prevented by the high point in the bladder-wall at which the anastomosis is made, and by the use of the catheter at suitable intervals after the operation.

The method of end-to-end joining of the severed ureter, has also received much attention of late. The inherent difficulty of this operation is one of its greatest drawbacks. The flaccidity of the walls and minuteness of structure of the ureter, as well as the depth at which most of these injuries occur, which necessitates that the repair be carried out in the bottom of the pelvis, have caused operators to favor bladder implantation. Kelly does not feel that these two operations are in any sense rivals, but thinks that there are indications for the employment of each.

Different methods of joining the severed ends of the ureters have been proposed, as follows:

1. Lateral implantation, or the end-in-side method. Originated by Van Hook. (Free hand method.)
2. Transverse end-to-end approximation.
3. Oblique end-to-end approximation. Bovée's method.
4. End-in-end. Done by various experimenters, and once in a human case, the result in the latter being a success.

In the main the dangers of these methods of anastomosis may be said to be urinary leakage, fistulæ, and constriction. Especially are these dangers threatening in the end-to-end method, *i. e.*, without invagination, and in the end-in-end method, with invagination. Van Hook's method seems to be free from these objections to a great extent, on the authority of his own experiments on animals. Kelly was the first to use this method (1893) on a human patient. In 1897 Bovée collected 12 cases of anastomosis of the divided ends of the ureter, of which seven were done in Europe and five in America. All the American cases lived, and three of the European cases died, though in none of them could the death be ascribed to the ureteral complication. In the series there was only one which showed a leakage, and this soon ceased. Three were done by Van Hook's method. Seven were end-to-end approximations, and although three died, there was no leakage in any of the seven, and the deaths, as far as could be ascertained, were not due to the ureteral conditions.

The possibility of intestinal anastomosis has presented itself to investigators since 1851, when it was performed in a case of exstrophy of the bladder by Simon. This patient died in a year with marked kidney changes. Intestinal anastomosis, if feasible, would be much easier of accomplishment than uretero-ureteral anastomosis, because of the size of the intestine, and also because there would be a complete avoidance of dangerous traction, which has been one

of the causes of the many failures of the latter method of operation. The ascending infection which involves the vast majority of all ureters thus anastomosed, is the one factor which is unsurmountable. Aside from this difficulty there is little reason why the intestines should not thus be utilized, since it has been found that the large bowel in the dog can assume the functions of a urinary reservoir, and that sphincteric control will be maintained. The opinion is expressed by some that notwithstanding the general belief to the contrary, the mere presence of urine in the bowel produces nothing more than a rather increased frequency of evacuation.

In the main, the difficulty in uretero-ureteral anastomosis is one of infection of the ureters and kidneys, and to a less extent, the causation of a certain amount of constriction, leading to kidney contraction. Simple anastomosis of the ureters to the intestines is not a permissible operation, as if any immediately fatal result is avoided, there will be certainly a gradual kidney involvement, sooner or later manifest. The operation proposed by Maydl, and elaborated experimentally by Peterson, may in the future give better results, but at present their results are not sufficiently encouraging to render its adoption justifiable in the human patient.

With regard to the remaining sites of ureteral implantation, but little need be said, as from a practical point of view, none is of any appreciable value. Kelly considers skin implantation in the same class with nephrectomy. The vagina as a site for implantation has also nothing to commend it. A. L. W.

Suprapubic Cystoscopy.—BY DONALD KENNEDY, M.D. (*Medical Record*, April 10, 1902, p. 610).

While performing suprapubic puncture of the bladder to relieve prostatic retention, the writer conceived the idea of examining the interior of the bladder through the opening made by the trocar-canula for the puncture. He had a trocar made to fit a No. 21 Otis endoscope, which he calls "trocar endoscope," and employed it in the case of a man in which it was found impossible to insert a Mercier coudé or bicoudé. The bladder was tapped with the instrument and nine ounces of urine withdrawn. This was repeated every two hours until the bladder was empty. The few drams of urine remaining were "sucked up" by means of a bulb attached to a catheter. The bladder being empty, the lamp was attached to the tube. The general condition of the bladder was plainly visible; areas of inflammation were made out; the mouths of the ureters detected, and had stone been present in the prostatic pouch, it would have been revealed. Of the size and contour of the prostatic lobes much could not be determined, owing to the fact that with reflected light the distal end of the tube had to be almost in contact with the bladder wall in order to illuminate it, thus giving a very limited area under observation.

This case is reported as a preliminary report of further studies being made in this direction. A. L. W.

Clinical Study of a new Silver Salt in the Treatment of Gonorrhea.—H. M. CHRISTIAN, M. D. (*Med. Rec.*, Sept. 27, 1902, p. 494).

Christian gives the results of an extended study of the treatment of gonorrhea with the new silver preparation, silver vitellin, or argyrol, its fanciful name.

His investigations were made with reference to the following points:

1. Effect of the remedy upon the discharge from the urethra.

2. Time at which the gonococci disappeared after treatment was first employed.

3. Whether the injection caused any pain in the urethra, or gave rise to any signs of urethral irritation.

4. Number of cases presenting any complications.

5. Length of time required to cure.

His conclusions are summed up as follows:

"The results obtained in our cases at the University Hospital have convinced me that we have in silver vitellin the best silver compound ever offered to the profession for the treatment of gonorrhea, for the following reasons:

1. That it is absolutely free from any irritating properties, solutions as high as 5 per cent. causing no discomfort.

2. That the gonococci on and beneath the urethral mucous membrane are rapidly destroyed.

3. The amount of urethral discharge is in a majority of cases at once lessened in a marked degree.

4. The actual duration of the disease is shorter than is obtained by the use of any other silver salt. In our cases thirty-eight were cured in from two to four weeks."

The Use of Argyrol in the Treatment of Acute Gonorrhea.—G. K. SWINBURNE, M.D. (*Med. Rec.*, 1902, Oct. 11, p. 574).

In this article the author seeks to outline in general what he considers the best method of using this new and valuable addition to the therapeutics of this disease.

He uses several methods according to circumstances, such as the severity of the disease, the chance of aborting the disease and the patient's ability to come frequently or not.

Treatment may be daily. In such cases he irrigates the urethra with one quart of hot 1-1000, or 1-2000 solution of argyrol and follows this by the injection of a 2 or 5 per cent. injection or instillation as the case demands, and gives the patient a 2 per cent. solution to use at home once or twice a day by injection in addition to the office treatment.

Patients who can only get to the office once or twice a week. receive the same treatment at the office and use 2 per cent. or 5 per cent. two or three times daily at home.

He uses irrigation with argyrol before the use of urethral instruments, where formerly he used permanganate solutions.

In chronic cases he claims good results with the use of this drug. And he uses as a lubricant or sounds in some cases a 5 per cent. ointment made with adeps lanae as a base, the argyrol being rubbed up with just enough water to render it smooth before incorporating it in the ointment.

He lays great stress on the non-irritating qualities of argyrol; 10 per cent. dropped in the eye produces no pain; 20 per cent. even in the urethra has produced no painful reaction even in acute cases.

He sums up as follows, that the drug has decided gonococcidal powers; it has a decided effect in reducing and allaying inflammation; it can be used safely in almost any strength and at any stage of the disease; the injections can be repeated almost as frequently as desired. He has seen no unpleasant symptoms due to the use of the drug and believes it to be a very valuable addition to our means of fighting the disease.

CUTANEOUS DISEASES.

1. **A Case of Nævus Vasculosus Mollusciformis.**—PROF. SIEFERT (*Archiv f. Derm. u. Syph.*, Vol. 59, p. 197).

2. **A Rare Case of Nævus Spilus.**—T. FABRY (*Arch. f. Derm. u. Syph.*, Vol. 59, p. 217).

3. **A Contribution to the Knowledge of Soft Pigmentary Nævi.**—JOHANNES FICK (Prof. Ehrmann's Laboratory, Vienna), (*Arch. f. Derm. u. Syph.*, Vol. 59, p. 323, 1902).

1. Siefert's patient was fifty-three years old. He was born with a fiery red mark on his face, which remained flat and smooth in the beginning, but later increased in thickness and in the last few years was covered with elevated tumors. Of special interest here, are the mucous membrane of the upper gums and mouth. It was thickened, hypertrophied and of soft consistency. The color of the affected mucous membrane was of bluish-red tint. No histological examination was made.

2. Fabry's case deserves attention from the fact that the nævus occupied all parts of the body, except face and scalp, and even there the pigmentation was marked. The pigment-nodes were quite smooth. No signs of any elevation could be noticed. There was an entire absence of any sign of hypertrichosis or telangiectasia. From his microscopical examination he is inclined to draw the conclusion that the pigment is derived from the blood from the smallest end arteries.

The contribution of Fick deserves great attention. After giving a detailed description and pictorial presentation of his microscopical findings from eight sections obtained from living patients, he enters into a spirited and well delivered discussion upon the origin of the pigment in the nævi. He goes over the whole unsettled and debatable question by presenting the views of other writers and then criticising them in the light of his own observations. He arrives at the following conclusions: The pathological increase of the pigment in the nævus is not the cause of the formation of the tumor. The formation and growth of nævus cells on one hand, the increase of pigment on the other hand, are two coordinate parallel occurrences, but not combined pathological incidents. 2. The nævus cells contain pigment only when they are in proximity to melanoblasts, with which they were in many places seen in contact.

3. In some nævi giant cells are found, while other signs of excessive hypertrophy or inflammation are absent. These giant cells differ from the nævus cells not only by their size, but also by their capacity for having their nuclei stained more deeply and by the presence of a basophile substance in their protoplasm.

4. The melanoblasts branch out in prolongations between the epidermic cells and merge into them. They are localized partly between the epithelial cells, partly on the border of epidermis and corium, partly between the nævus cells, and partly in the deeper layers of cutis around the vessels.

5. Regarding pigmentation, the nævus cells behave in the same manner as the epithelial cells.

6. The pigment which can be demonstrated in nævi is localized in the various cells, epithelial, nævus, giant cells and melanoblasts.

7. The histological pictures of pigmentary soft nævi prove the correctness of Ehrmann's view of pigment formation.

1. **Linear Skin Eruptions upon the Lower Extremities.**—DRS. L. FISCHEL and F. PINKUS (*Derm. Zeitsch.*, Vol. IX., p. 123, 1902).

2. **A Contribution to the Knowledge of Linear Diseases.**—T. BERTAMINI (Prof. Jarisch's Clinic) (*Arch. f. Derm. u. Syph.*, Vol. 62, p. 35, 1902).

Since Blaschko's publication "The distribution of the nerves in the skin" cases have been reported which serve either to affirm or to deny the distribution of certain skin eruptions along their course. The writers report three cases: Lichen ruber verrucosus, lichen chronicus linearis (Touton) and a supposed lichen planus upon the lower extremities. They do not consider the distribution of the efflorescences in any way connected either with the course of the nerves, or with the distribution of blood vessels, or with the arrangement of the hair. Although mindful of the irregularities of the distribution of the nerves of the lower extremities, no certain rule can be laid down as to the course of linear nævi.

2. Bertamini in reporting his case of a woman, forty-six years old, suffering from a linear eruption of one year's standing on the abdomen, lumbar region and lower extremities, describes the histological characteristics of the eruption and in a critical review of the classification of the affection concludes that it is to be considered rather a linear dermatitis, lichen ruber planus, than a nævus.

1. **The Effect of Roentgen Rays upon the Normal and Diseased Skin.**—W. SCHOLTZ (Dermat. Clinic, Univ. of Breslau) (*Arch. f. Derm. u. Syph.*, Vol. 59, 1902, pp. 87, 241, 421).

2. **Exact Measures in Radiotherapy.**—BÉCLÈVE (*Jour. d. mal. cutan. et Syph.*, Vol. 14, 1902, p. 172).

3. **The Influence of Roentgen Rays upon the Different Varieties of Sarcoma.**—WILLIAM B. COLEY (*Medical News*, 1902, p. 542).

4. **A Case of Epithelioma Complicating Lupus Erythematosus, Treated by Scaping and Healed by the X-Rays.**—G. G. STOPFORD TAYLOR (*British Medical Journal*, 1902, p. 1080).

To determine the action of X-rays upon the skin, Scholtz brings forward his experimental and histological researches and clinical observations. In his experimental researches he tries to determine what is the active agent of the rays and what action is this agent capable of producing. He conducted his experiments mostly on young pigs, the skin of which in every particular is very much like human skin. The active factor is the rays themselves and not the electric waves; the action is produced not only at the point of entrance but also at the point of exit of the rays. The skin alone responds to the action, inner organs and tissues seem not to be influenced. The clinical effect of the rays is visible only several days after the application. The rays have no bactericidal power, and therapeutically this hardly plays any part. Histologically they chiefly and primarily influence the cellular elements of normal skin; they undergo a slow process of degeneration, while the collagenous and elastic tissues, the muscular and cartilagenous elements are not at all or only in a slight degree altered. Those tissues suffer only secondarily—owing to the degeneration of the cells and the inflammatory reaction.

2. The epithelial cells are the first which undergo degeneration, the cells of glandular organs, of vessels, muscles and connective tissue are changed in a lesser degree.

3. The degenerative process takes place in the nucleus as well as the protoplasm.

4. As soon as the degenerative process of the cellular elements reached a certain point, symptoms of reaction come into view, such as engorgement of vessels, serous exudation into the tissues, appearance of leucocytes and white blood corpuscles. When the application of the X-rays causes a severe process, the leucocytes penetrate en masse the degenerated cells and bring about their complete destruction.

5. The changes which occur in the smaller and larger vessels probably play an important rôle in the process of healing following X-rays.

After determining the histological changes in normal skin, the writer examined histological sections from skin affected with lupus. Here the reactive inflammation and hyperæmia, which take place, and are concentrated in the affected tubercle itself, are the healing agents and the bactericidal action of the X-rays can hardly be considered. The same reaction he found in lepra, one case, carcinoma of the skin, four cases, mycosis fungoides, one case, psoriasis, five cases.

When the writer had made clear to himself the action of the X-rays he then undertook clinical observations on a large scale. During the last three years two hundred and twenty (220) cases of various skin diseases have been so treated. From sixty-four (64) cases of lupus he draws the conclusion that in severe cases on energetic treatment with the X-rays, brings about a relative by satisfactory result in a few months—giving better cosmetic results than curetage. In the milder more superficial cases of lupus energetic, intermittent application is most satisfactory; no scars. Lupus erythematosus, five cases good cosmetic results. The effect of X-rays upon diseases of the hairy scalp and beard can hardly be regarded as satisfactory. The rays did not destroy the parasite of favus or tinea tonsurans. They removed the hair, but the disease returned with the growth of the new hair. In sycosis and folliculitis barbæ only in mild cases was a definite cure obtained, not in severe long-standing attacks.

In acne vulgaris and acne rosacea there was no effect. New efflorescences of acne appeared during treatment. In eczema the results were satisfactory, less moisture, less scaling, and the objective symptoms improved in a remarkable manner. Good results were obtained in psoriasis, nearly entire disappearance in some patients and in others an "absolute" disappearance of the eruption. Since in some cases new psoriatic lesions appeared during treatment, the writer expects relapse, but he thinks that "an intermittent X-ray treatment" during several years may lead to a permanent cure. In pruritus vulvæ an improvement was noticed. No results obtained in lepra. In carcinoma of the nose after producing a necrotic action, a microscopical examination of the tissues did not demonstrate any carcinomatous tissue. A final opinion in such cases can only be expressed after years of observation.

The capital factor in the method of application of X-rays is the quality of the rays used. There exists a whole scale of X-rays which differ from each other by their power of penetration, on which depend their effects produced upon living tissues. Rays which penetrate very little, being quite entirely absorbed successively encountered layers, have a deleterious action upon the skin, which may end even in its complete destruction.

Rays which penetrate deeply, being scarcely at all absorbed by the tissues.

they traverse, exercise no action or only a slight one upon them: they are indifferent. Then there exists between those two extremes, a category of rays which have only mild penetrating power, which, being partly absorbed, in certain pathological conditions, can provoke in the thickness of the skin a reaction, leading to a curative effect.

It is then important for the physician to be able to produce at his will, rays more or less penetrating, and especially to be able to determine the exact degree of penetration of the rays he is using. Béclevé (2) describes three instruments of French invention which permit the physician to satisfy himself on the two foregoing points. The instruments are Villard's ampoule, the spintermeter, and the radiochrometer of Benoist. He gives a detailed account of their construction. Coley (3) gives an account of the influence of the rays upon fourteen cases of different kinds of sarcomata: eleven (11) round celled, two (2) spindle celled, and one of a recurrent osteosarcoma (no micros. exam.) The following regions were occupied: Neck, the parotid, femur, superior maxilla, muscles of the thigh, mastoid portion of temporal bone, pectoral axillary regions, and back (fascia). He draws the following conclusions: That (1) the X-ray has an inhibitory action upon the growth of all forms of malignant diseases and especially upon sarcoma, producing (2) even in inoperable cases a total disappearance of the tumor; their action is advantageous not only in sarcoma but in every variety of cancer, not only upon the skin but probably in tumors located deeply; (6) the X-ray has a very marked influence upon the pain of nearly all types of malignant tumors, causing entire relief in the majority of cases.

Very good results have been obtained by Taylor (4) by combining the application of X-rays with preliminary scraping in a man of 59 years who suffered with an epithelioma (microscop. diagnosis) and lupus erythematos of the nose. The epitheliomatous ulcers originated from a horny excrescence on the tip of the nose. As much as possible of the growth was removed with a scraper and the surface submitted to the influence of the rays. Ten minute exposures were given daily for a month, a rest for ten days and again an exposure for five minutes for a week with alternate periods of rest. Four months after beginning of the treatment the nose was completely healed.

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